

MacHome

www.machome.com

Tools for Work, Play, Education

Apple's Fall Lineup

Upgrade Your Mac

The Hottest Cards Compared

Home Automation

Control Appliances from Your Mac

Macs Mean Business

MYOB Changes Accounting Forever

Plus:

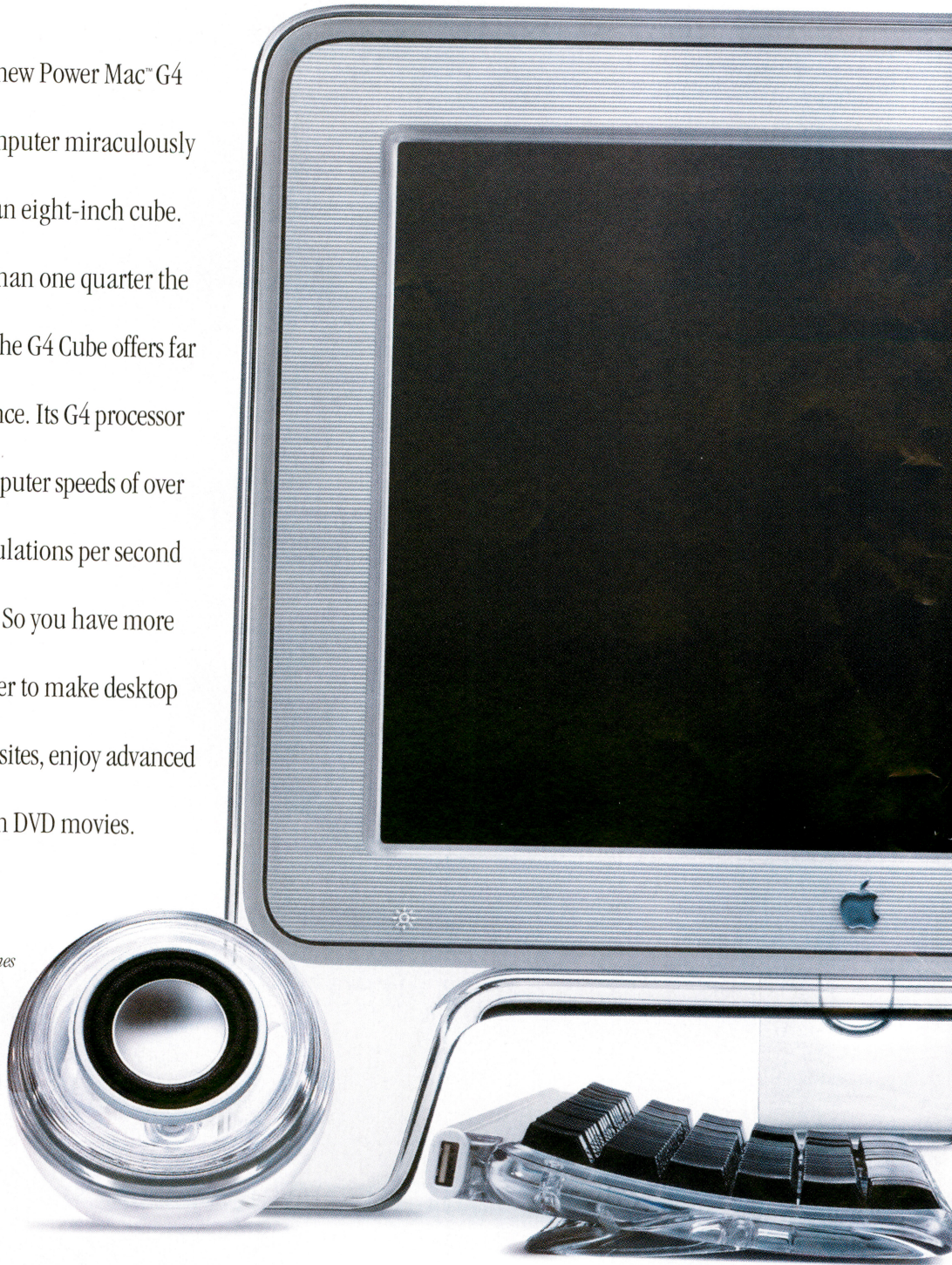
Adv
Sending On

cks
ers
rds

Honey, I shrunk the

Introducing the new Power Mac™ G4 Cube: A supercomputer miraculously engineered into an eight-inch cube. Though it's less than one quarter the size of most PCs, the G4 Cube offers far greater performance. Its G4 processor reaches supercomputer speeds of over three billion calculations per second (three gigaflops). So you have more than enough power to make desktop movies, create websites, enjoy advanced 3D games or watch DVD movies.

The Power Mac G4 Cube comes with slot-loading DVD drive, Apple-designed Harman Kardon stereo speakers, a new pro keyboard and ergonomic optical mouse.



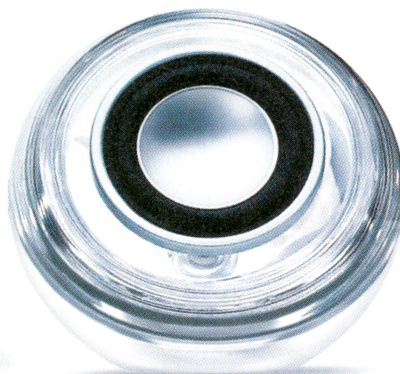
supercomputer.

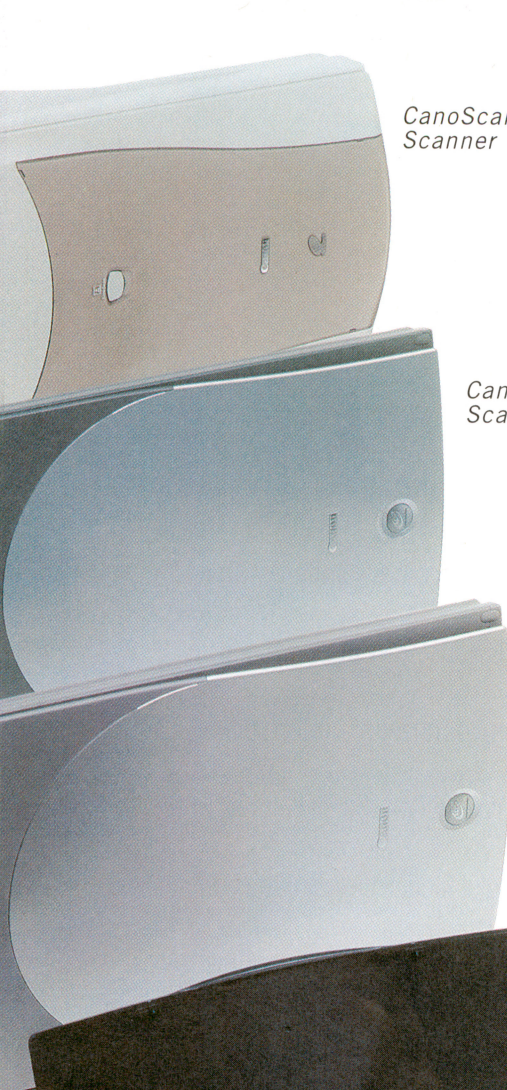
Choose from three perfectly matching displays: 17-inch (16-inch viewable) flat Diamondtron™ CRT, 15-inch flat-panel display or the breathtaking 22-inch flat-panel, letterbox-format Apple Cinema Display.™

Designed to be cooled without a fan, the G4 Cube is one of the quietest computers ever built. And it comes standard with a new optical mouse, pro keyboard and Apple-designed Harman Kardon stereo speakers. True, it looks like it belongs in the Museum of Modern Art. But the G4 Cube is actually a supercomputer that belongs right on your desk. Call 1-800-MY-APPLE or visit www.apple.com.



Think different.™





*CanoScan D660U
Scanner*

*CanoScan N656U
Scanner*

*CanoScan N1220U
Scanner*



BJC-85 Printer

Peripheral

Take a quick look around. You'll find a Mac®-compatible Canon peripheral for just about any purpose you could imagine. From high-resolution printers and scanners to the world's best-selling portable printer, we've got what it takes to keep Mac users smiling. And with



The Canon Think Tank System™

The S400, S450 and BJC-8200 printers all feature individual ink tanks to reduce ink waste and save you money. Plus, the ink sensor system alerts you when you're running low.

Award-Winning Portable Printer

Need a traveling companion for your iBook™ or PowerBook® G3? Our 3.1 pound BJC-85 Color Bubble Jet Printer was named "Best of Show" at the Macworld San Francisco 2000 Expo.*

Vision

more than sixty years of imaging expertise built into every single detail, the term "state-of-the-art" is somewhat of an understatement. Come and see for yourself. Visit us on the Internet at www.ccsi.canon.com/macfriendly or call 1-800-OK-CANON for more information.

Canon KNOW HOW™

BJC-8200 Printer

S450 Printer

S400 Printer

*MultiPASS C555
Multifunction Printer*



Advanced Flatbed Scanners

Our new CanoScan® family showcases a host of innovative features including our Z-Lid™ Expansion Top (on select models) and a built-in 35mm film adapter on the CanoScan D660U Scanner.

Superior Multifunction Printers

Print. Fax. Copy. Scan. After introducing the world's first Mac-compatible multifunction printer, we've taken technology to a new level with our MultiPASS™ C555 Multifunction Printer.

October 2000 Contents

[www.machome.com]

Volume 8, Number 10

The Family Issue

Wild Cards _____ 20

By MacHome Staff

Is it time to buy a new Mac, or is it time to endow your old Mac with special powers made possible through a processor upgrade card? Which one is right for your budget? Which one will fit the bill?

Auto-Mac-Tic Home _____ 28

By Jeff Battersby

What's that? You mean you still have to manually turn on the sprinkler to water your garden? Learn how to control all of your household appliances right from your Mac.

Apple's Core Curriculum _____ 32

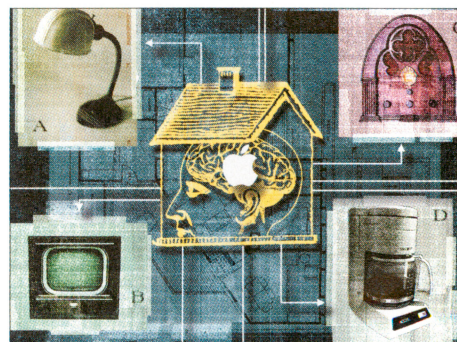
By Carolyn Blackburn

All across the country, Macs of every description are gracing the hallowed halls of our hipper institutions of learning. Find out how these schools are using Apple technology to make the world a better place.

The Mac Means Business _____ 36

By Jeff Battersby

MYOB has announced a new product that promises to forever change the face of accounting — making it easier and more accessible to mere mortals. Follow along, as we take you on a special preview of AccountEdge.



28



32

NewsWire

Read all about it: news, products, rumors, gossip, quotes, and innuendo

Report from Macworld
Apple's Huge Hardware Harvest
Epson Unveils New Inkjets
USBXchange from Adaptec
ZBrush Paints in 3D
Agfa SnapScan e50
Watch TV on Your Mac with ProTV



12

Departments

38 Your Office

- 38 Home Office**
Online Bill Paying Services, What are they all about?!
- 42 Reviews**
Face-Off: Digital Camcorders
Close-Up: Illustrator 9

52 NetLife

- 52 Feature**
Use e-greeting cards to send regards
- 55 Dot.Com**
Ideas for an autumn shopping spree
- 56 Bookmarks**
Cool Internet radio stations

58 Your Family

- 58 Feature**
Gardening software for your Mac
- 60 News & Reviews**
Our take on the latest family and education titles

64 Entertainment

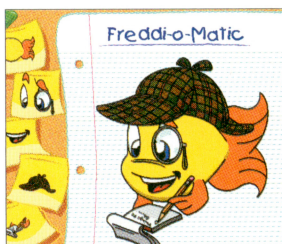
- 64 The Mac Workshop**
Making an iMovie
- 66 News & Reviews**
A look at the latest games

70 Back to Basics

- 70 New Owners**
Creating an emergency backup
- 72 You Ask, We Answer**
Respecting your preferences
- 74 Tips & Tricks**
The power of Function keys
- 76 The Way It Works**
The mysteries of file compression



42 Your Office Reviews



60 Education Reviews



66 Entertainment Reviews

Columns

- 6 From the Chief**
We Are Family
- 10 Write On**
Getting Back to Basics
- 78 Ad Index**
- 79 Smart Shopper**
Your source for best Mac buys!
- 96 Commentary**
Macs To Go: 5 tips for saving battery life

Reviewed This Issue

Your Office: Software

- ★★★★ 3D WalkAround
- ★★★★ Canon Photo Advanced Edition
- ★★★★ I KnockOut 1.5
- ★★★★ Netbarrier 1.5.2
- ★★★★ I QuickKeys 5

Your Office: Hardware

- ★★★★ I Back-UPS Pro 500
- ★★★★ I Canon ZR10
- ★★★★ Digital DualCam 640
- ★★★★ I JamCam 3.0
- ★★★★ Sharp VL-SD20U
- ★★★★ SkyLINE 11MB Wireless PC Card
- ★★★★ VST CD-RW Drive

Entertainment

- ★★★★ Baldur's Gate
- ★★★ I Tomb Raider: The Last Revelation

Your Family

- ★★★★ Freddi Fish's One-Stop Fun Shop
- ★★★★ Guitar Method 1.2
- ★★★★ Reader Rabbit 2nd Grade
- ★★★★ Winnie the Pooh Activity Center

Our Rating System

- ★★★★ Mac-nificent. You gotta get it. No flaws.
- ★★★★ Excellent. Recommended even if it has a minor flaw or two.
- ★★★★ Average. Despite problems, still a worthwhile product.
- ★★ Below Average. Has serious flaws that limit its usefulness or fun.
- ★ Poor. Avoid this product at all costs.



Indicates iMac/G3 compatibility

We Are Family

For the last two years, Apple has offered a solid quartet of Macs: a professional desktop and portable, and a consumer desktop and portable. But now the family is growing and expanding.

We all knew there would be a few surprises at Macworld New York this past July, but few were prepared for just how many surprises there would be.

When the iMacs first became available in multiple hues — bright, playful candy colors — they attracted all walks of life, but seemed aimed primarily at our inner child. Now the iMac is entering its “adolescence.”



dw@machome.com

They're decked out in deeper colors, with names that might appeal to a broader spectrum of computer users — Ruby, Indigo, Sage ... And now we've even got a “rebel” of sorts, the Snow iMac — though it looks like its

brethren, it also stands far apart; I think it's definitely the quirkiest looking computer on the market today.

And it's reassuring to see that the G4 — the powerhouse of the Mac family — has grown in stature, because now it comes in versions that sport two processors instead of one, the better to go head-to-head with the hard-hitting competition out there.

We also have a brand-new addition to the family — the G4 Cube, which turns the Apple hardware quartet into a quintet. The Cube is smaller (much smaller) than a regular G4, it's more

expensive, and it's not nearly as expandable. So who is this for, exactly?

Like the iMac, the Cube is for those who are not so much interested in tinkering with the inner circuitry of their computers. They're not excited by the prospect of adding processors, cards, extra hard disks, etc. But because the Cube has a G4 processor, and because you can add whichever monitor you'd like, it's ideal for those who want to do some pro-quality graphic design or video work. Also, of course, it appeals to those with limited space.

It's great to see a new, affordable flat panel monitor and stylish new CRT monitors. And finally, it's downright exhilarating to see each outfit in the Mac family with a new, full-size keyboard and slick new optical mouse.

So, Apple hardware is one big, sprawling, colorful, exotic, and powerful family. And speaking of family, with the holidays coming up, we present our annual Family issue, with articles on automating your home, making an iMovie, and sending an electronic greeting. So put a log on the fire, curl up, and enjoy our October issue.

David Weiss

David Weiss
Editor

President

James Capparelli, jcap@machome.com

Publisher

Susan Ford, susan@machome.com

Art Director

Joy Jacob Sheldon, joy@machome.com

Editorial

Editor David Weiss, dw@machome.com

News Editor Jackie Dove, jackie@machome.com

Reviews Editor Ross Tibbits, ross@machome.com

Associate Editor Carolyn Blackburn, carolyn@machome.com

Copy Editor Tyler Davidson, tyler@machome.com

Editor at Large Chris McVeigh, chris@machome.com

Contributing Writers Jeff Battersby, Helen Bradley, Andy Ihnatko, Art Jones, John Lee, Cathy Parise, Gene Steinberg

Circulation

Newsstand Consultant Angelo Gandino

Circulation Manager Charles Slomovitz

Advertising

Regional Manager

Steve McMahan, steve@machome.com
415-957-1911, ext. 18

Shopper Sections

Advertising Sales Manager

Steve Gaynes, sgaynes@machome.com
415-957-1911, ext. 38

Operations

Business Manager

Lorene Kaatz, lkaatz@iname.com

Webmaster/Network Administrator

Dan Lavie, dan@machome.com

Office Administrator

Ryan Worf, ryan@machome.com

MacHome Interactive

www.machome.com

Hot Tips/CD-ROM Editor

Pat St.-Arnaud, pat@machome.com

Subscribe: www.machome.com/hottips

Sales & Marketing

Susan Ford, susan@machome.com

MacHome Software Center

Joel Mueller

Reprints

For 100 or more high-quality article reprints, please contact Reprint Management Services at 717-560-2001

Customer Service

For change of address, subscription inquiries, back issues, and service problems, call 800-800-6542 Monday to Friday, 7:30 A.M. to 10:30 P.M. central time; or write to **MACHOME JOURNAL Subscriptions, P.O. Box 469, Mt. Morris, IL 61054**; or e-mail us at mhjr@mf.kable.com. Basic subscription rates: One year (12 issues plus 6 CD-ROMs) U.S., \$34.95; Canada, \$44.95; foreign, \$54.95 (U.S. funds only). **MACHOME JOURNAL** may rent its mailing list.

General Offices

703 Market Street, Suite 535, San Francisco, CA 94103
Telephone: 415-957-1911; Internet: www.machome.com

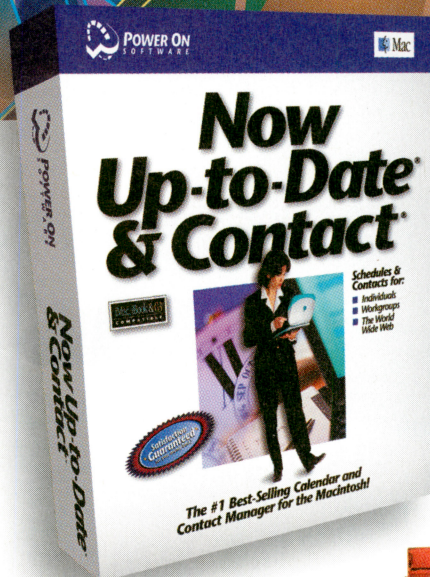
No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. **MACHOME JOURNAL** is not responsible for unsolicited manuscripts. Submissions must be sent electronically for consideration. **MACHOME JOURNAL** is an independent periodical not affiliated with Apple Computer, Inc. “**MACHOME JOURNAL**” and “**Solutions for Work, Play & Education**” are trademarks of **MACHOME JOURNAL**. Copyright © 2000 by **MACHOME JOURNAL**. All rights reserved.

The Internet-Savvy Contact Manager & Calendar

**NEW
VERSION!**



**WITH OS9 AND
PALM SUPPORT**



**POWER ON
SOFTWARE**
The *POWER* of Productivity.

Whether you drive a desktop Mac (even a trusty old 68K machine running System 7), pound a PowerBook, or pack a Palm®, you need Now Up-to-Date & Contact, the best choice in contact management and calendaring.

No other product allows you to keep track of your contacts and schedule so easily. With its ability to recognize common phrases and automatically enter items on your calendar, you will spend less time on data entry. Built-in email tracking; word processing with mail merge; label and envelope generators with postal bar codes; and alarms to remind you of key events make this an

essential product for anyone who needs to save time and stay organized. A built-in TCP/IP server allows you to add users and share group data, while keeping personal information private. Designed for the Internet, Now Up-to-Date & Contact offers a unique web plug-in architecture that will have you soaring through cyberspace.

Need a map or an e-mail address for someone? Click the blazingly fast search engine to find the contact and let the software do the rest! It is no wonder that Now Up-to-Date & Contact is the #1 best-selling Macintosh PIM on the planet.

Phone: 800-344-9160 ■ 614-413-4000 ■ Fax: 614-413-4100 ■ <http://www.poweronsoftware.com>

Copyright ©1999 by Power On Software, Inc. All rights reserved. Now Up-to-Date and Now Contact are registered trademarks of Power On Software, Inc. Macintosh is a registered trademark and Finder is a trademark of Apple Computer, Inc. Palm Computing is a registered trademark and Palm V is a trademark of Palm Computing, Inc., 3Com Corporation, or its subsidiaries. All other trademarks acknowledged.



Jodie
world traveler

"I switch from words to numbers to pictures all day. From mental to global. And back. I need tools that can keep up with me and my Mac." **Microsoft® Office 2001.**
All the essentials. Made easy. Made for my Mac.

© 2000 Microsoft Corporation. All rights reserved. Microsoft is a registered trademark of Microsoft Corporation in the United States and/or other countries. Apple, Mac, and Macintosh are registered trademarks of Apple Computer, Inc.

Office^{Microsoft}:mac 2001

microsoft.com/mac

Microsoft

Ad Nauseam?

Mac users everywhere need to put their collective foot down regarding Apple's recent policy of putting ads in the Mac OS.

The OS is not the place for ads, and Apple needs to be told this. The time to do something is now. OS X isn't out yet. If we passively wait and do nothing, we will deserve what we get.

This is one aspect of Macdom that is inferior to the Wintel world. Microsoft hasn't added horrid banner ads or "buy fonts" ads to the Windows OS. I suppose I can live with the useless Apple logo as it appears in the current build of OS X, but the other ads are totally inappropriate. Even the Apple logo makes no sense. Everyone using OS X will know it's an Apple product.

It can only get worse from here if we do nothing. Imagine blinking, pulsating banner ads on the desktop that you can't click away! Or perhaps they could include a ticker for the "convenience" of Mac users that just happens to list Apple's stock price.

Stand up as consumers and loyal Apple customers and tell them to eliminate all ads in the Mac OS.

— *Stephen Richard Sauer II*

Stand Up for Wireless!

I purchased a used MegaHertz All-Points wireless modem, which is now sold by a company called RIM (www.rim.net). It cost me less than \$100, and the service, through GoAmerica or BellSouth, has a decent "basic" fee of \$10 per month for occasional email. This modem is no speed demon — it works at speeds under 14.4 — but it's still usable. Presently, according to the RIM page above and BellSouth, both

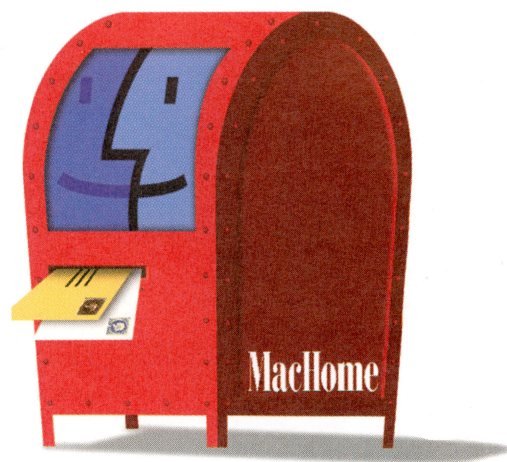
clearly state that supported operating systems/platforms include the Macintosh and also the Newton.

I found out you had to get and install a product called WyndMail, from Wynd Communications. Wynd no longer sells it, but I was able to find and install WyndMail for the Newton and WyndMail Mac. However, there does not appear to be any response from the Network. I can request a user profile, and wait for an hour. I can neither send nor receive email.

I initially verified operation on my Win95 laptop. But unfortunately the Mac and Newton software don't work. WyndMail could potentially be a good piece of software, as it allows large messages to be forwarded somewhere else, can send a text message to a pager, and send wireless faxes.

There could be a fix, as both versions of WyndMail (Mac and Newton!) were written by Infowave Wireless, of Mac printer driver fame.

But here's my point: Just recently, GoAmerica and Wynd announced they were merging! (Go to www.wynd.net and click "Find out about GoAmerica/Wynd Merger.") Everyone who uses a PowerBook above OS 7.5 and a Newton (130, MP2000/2100, & eMate), and is interested in this wireless possibility should politely email Wynd at merger@wynd.com and GoAmerica at marketing@goamerica.net. A suggested message would be: "I am writing to find out if the merger of Wynd and GoAmerica will allow you to re-release WyndMail for the Macintosh. I would be interested in subscribing to your wireless service if an updated version of WyndMail were again made available."



Let's go for it!

— *Mark Rollins*

Back to Back-to-Basics

I know several people who use computers professionally. My best friend has seven-plus functional Macs at his business and his home, and he is only a bit more educated on the Mac than I am, thanks to his hired techie — and, I still feel stupid about computers. I don't have the time to spend the day studying computers or taking classes — I'm too busy trying to make a living, enjoying family and friends, and involved in various other pursuits. But I have troubles all the time. The system is so complex — either it's the phone company, or the server — I never know where the problem is!

So, the question is, why is it all so complicated? Why do I struggle and feel stupid, yet many others ask me for help? Why can't I even talk to people "in the business?"

The gap between the computer nerds and the rest of us is a huge and growing problem. I run into it all of the time trying to deal with various info suppliers (around the stock market). Different languages seem to prevail. The growth of computer

technology is apt to stumble badly if John-Q-Public can't keep up.

Apparently, the Berkeley (California) Mac User's Group says your mag is the best — i.e., easiest to understand. But still, you are really beyond me. I guess I'm saying that we need a mag that is really basic.

I just received my copy of the July issue of *MacHome* this week. I noticed that the entire magazine contained 97 pages of interesting articles, including ads, that were targeted to experienced computer users, but only one page (72) that would be of any interest to a person who had just purchased their very first computer.

Although I have been an Apple user since the old 2Es back in the 80s, and now teach students using my G4, I can still relate to those who purchase a new computer, bring it home along with a copy of your July issue, turn to page 72 and follow the directions:

Opened the box, removed the computer, saved the boxes. Threw away the mouse that was included, went back to the store and purchased a different one for \$40. Purchased a desk lamp so they could see the keyboard. Proceeded to set up according to the sheet packed with the computer. Decided they didn't need to "Update" anything, didn't even know what that referred to. Found switch, turned the computer and monitor on (instructions came with the computer). Computer made a whirring sound. Some little pictures showed up on the screen. I moved the mouse, a little arrow on the screen moved. Now what do I do?

Does the above sound familiar?

When you first began publishing, the New Owners section always contained very basic articles that were a real help to those who were new to the computer world. Somewhere along the way you have strayed from this concept. Believe it or not, there are still many out there that would really appreciate articles that could answer their questions as they begin

to learn, with detailed instructions as to how they could, for instance, write a simple letter with a program (after you tell them what a program is), such as Appleworks, then move on to database, spreadsheet, etc., in future issues.

I realize the above comments sound critical, but please accept it as constructive criticism. As a longtime subscriber I really enjoy your articles, but we do have to think of the beginners, don't we?

— LeRoy L. Goodine

Indeed we do! Our goal is to cut through the Technobabble to make your lives easier. Still, we do appreciate the reminder! You might also want to take a look at our iMac Buyer's Guide, which is geared even more for the beginner and first-time buyer.

Corrections and Additions

In our last issue, in our review of ConceptDraw, we said that the program contains more than a hundred drawing objects, and it would

have been more accurate to say that it contains more than 1,500. We also placed the developers, Computer Systems Odessa, in Russia, whereas they hail from the Ukraine. Finally, we mentioned that ConceptDraw isn't able to import Visio files, but we just learned that now they will offer a free utility to convert Visio files. **MHJ**

write to us...

Please write us with your comments! All letters are assumed intended for publication and may be edited. You can reach us by snail mail at:
703 Market Street,
Suite 535
San Francisco, CA
94103 or by email:

letters@machome.com

ViaVoice™ for Mac® Enhanced Edition

... starts from the award-winning success of the first-ever natural speech recognition product for the Macintosh® – ViaVoice for Mac Millennium Edition – and takes off from there!

You Talk, i Type.



IBM listened to feedback from Mac users on what they'd like to see next in a Mac speech product, and put these exciting new features in Enhanced Edition:

- USB microphone for consistent, high-quality digital signal
- Direct Dictation with formatting and editing into Microsoft® Word 98, AppleWorks 6.0 and Internet Explorer 4.5
- Command and control features in Word 98, AppleWorks 6.0, Internet Explorer 4.5 and Outlook Express 4.5
- Navigate the Net, launch URL's with basic voice commands, and speak directly into chat rooms in Internet Explorer 4.5
- Specialized vocabulary topics for Business and Finance, Computers, Chatter's Jargon and Cuisine
- Greater accuracy and improved correction model

www.ibm.com/software/viavoice

Available at computer retail stores where Macintosh products and software are sold, as well as Mac catalogs, Shop IBM and The Apple Store.



IBM and ViaVoice are trademarks of International Business Machines Corporation in the United States, other countries or both. Apple, Mac and Macintosh are trademarks of Apple Computer Inc., registered in the U.S., other countries or both. Microsoft and Outlook are trademarks of Microsoft Corporation, registered in the U.S., other countries or both.

The Cubist Phase

Macworld Expo NY 2000 was hardware city

— a stunning, unrivaled, riveting display of some of the fastest, sleekest, most stylish computers on Earth, unleashed by Apple's master showman and iCEO extraordinaire Steve Jobs. From the biggest (the muscular, multiprocessor G4s) to the smallest (the not-at-all humble optical buttonless mouse), there was no end of tricks and treats. The products introduced at Macworld were not only a feast to the eye, but a relief on the pocketbook, serving the needs of every Mac user regardless of their level of expertise or income.

The Cube

If anything exemplifies this year's summer Macworld, it has to be the Cube. This is essentially a Power Mac G4 tucked inside the body of an eight-inch, crystal-clear cube. The G4 Cube, for \$1,799, runs silently without a fan and features a 450MHz processor (a 500MHz model is available through Apple's online



store for \$2,299). The Cube features 64MB of RAM (expandable to 1.5GB), 20GB of storage space (you can order up to 40GB), a slot-loading DVD drive at the top of the unit (making it look, some have opined, like a very elegant toaster), and connectivity to the tune of two FireWire ports, two USB ports, 10/100BASE-T Ethernet, and a 56K modem. Want to add more memory or an AirPort card? No problem. The computer's guts are easily accessible by simply lifting them out of the case. The package comes with Apple's new optical Pro Mouse, Pro Keyboard, and a pair of Harman Kardon speakers.

Two in One

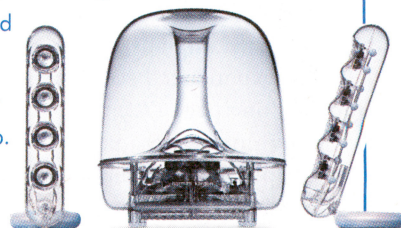
What's better than a Power Mac G4? Two Power Mac G4s, of course. And no, that was not a trick question. Apple's new Power Mac G4 line now features dual processors in the 450MHz and 500MHz models. So if you're running processor-

Perk Up Your Ears

First, Harman Multimedia introduced iSub, the space-age subwoofer for the iMac. Now it's SoundSticks, a three-piece speaker system designed for all USB Macs. SoundSticks is comprised of two 10-watt satellite speakers backed by the 20-watt subwoofer, iSub. The set sells for \$199.

The satellite speakers contain four Odyssey transducers that give you high frequencies beyond 20KHz. They're available now from the Apple store online at www.apple.com.

Harman Multimedia, 877-266-6202,
www.harman-multimedia.com



intensive applications such as Photoshop, look forward to a huge difference in speed. The 450MHz model is packed with 128MB of RAM, a 30GB hard drive, and a DVD-ROM drive for \$2,499. The 500MHz model packs 256MB of RAM, a 40GB hard drive, and a DVD-ROM drive for \$3,499. A new single-processor 400MHz G4 with 64MB of RAM, a 20GB hard drive, and a DVD-ROM drive for \$1,599 was also introduced. All three new models ship with USB and FireWire, 56K v.90 modems, three full-length, 64-bit, 33MHz PCI slots, and Gigabit Ethernet (that's 10/100/1000BASE-T Ethernet).

That's tailor-made for quickly transferring large files, such as image and digital video files, over a network. They all come with Apple's iMovie 2 pre-installed.

That brings us to iMovie 2. This new version of iMovie, for \$49, features an improved interface and audio-editing capabilities, new special effects, and more professional editing capabilities. It comes bundled with all FireWire Macs and iMacs. The original iMovie is still available on the Web for a free download.

News Flash 5!

Macromedia has

released Flash 5, a new version of its Web animation program for \$399. Create menus, navigation, and animations with a new interface that's easier to learn. You can now import bitmap images into vector illustrations. Macromedia, 800-457-1774, www.macromedia.com

What? No Kiwi?

There's a whole new rainbow of iMac colors. Borrowing a page from an urban clothier catalog, Apple introduced a souped up line of iMacs in Indigo, Ruby, Sage (that means green), and Snow, in addition to the popular Graphite.

While we will always cherish our fruit-flavored iMacs, this new generation represents a ratcheting up in performance and a drop in price, punctuated by the brand-new color palette. Here's the lineup:



The Basic iMac, for \$799, comes in Indigo only. It's got a 350MHz G3 processor, 64MB of RAM, a 7GB hard drive, a modem, 10/100BASE-T Ethernet, a CD-ROM drive, and USB. There's no fancy stuff such as FireWire or AirPort compatibility.

The iMac DV, available in Indigo or Ruby for \$999, features a 400MHz processor and a 10GB hard drive, plus FireWire, a CD-ROM drive, and an AirPort slot.

The iMac DV+ in Indigo, Ruby, or Sage for \$1,299, gives you more speed and storage space: a 450MHz G3 processor, a 20GB disk drive, plus a slot-loading DVD-ROM drive, and it's AirPort ready.

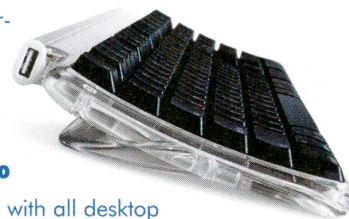
The iMac DV Special Edition, in Graphite or Snow for \$1,499, features a 500MHz G3 processor, a 30GB disk drive, 128MB of RAM, USB, a DVD-ROM drive, FireWire, and an AirPort slot. All DV models support VGA video mirroring, meaning that devices such as a TV monitor can display the same images that are on your computer screen. The new generation of iMacs also ship with an ATI RAGE 128 Pro graphics accelerator card. DV models include iMovie 2 and a FireWire camcorder cable.

Apple, 800-538-9696,
www.apple.com



Ditch Your Mouse Pad?

The much reviled "hockey puck" mouse and the standard Apple keyboard are now history. Jobs unveiled the **Apple Pro Mouse**, a no-button (or perhaps, more accurately, an all encompassing button) optical mouse, as well as the sleek, transparent, full-sized **Apple Pro**



Keyboard. Both are standard with all desktop

computers. The optical mouse features an ergonomic, full-surface button in an elliptical shape, and gives you precise positioning even without a mouse pad. The new keyboard, housed in a similar crystal-clear case, offers full-size function and navigation keys, volume control, disc-eject keys, and two USB ports. While

they're free with all new Mac systems, you need not deprive yourself; the new mouse and keyboard are \$59 each.



In Your Face

To complement the new Cube and G4 line, Apple just had to make sure you had something new to look at: a clear

17-inch Studio Display CRT

(\$499) and a **15-inch Studio**

Display flat panel for \$999. The

new monitors are powered by the

computer, which eliminates the need for

a separate power cord. In addition, each has

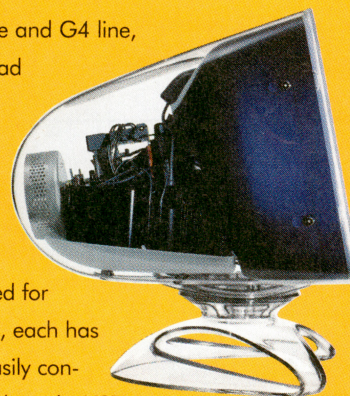
a two-port powered USB hub to easily connect

to desktop devices such as keyboards, USB

speakers, and digital cameras. Each new monitor also features the

Apple Display Connector, a cable that carries analog and digital

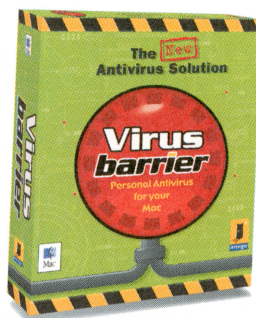
video signals, USB data, and power over a single cable.





Protection

While it's true that the Mac side of the universe is not as plagued with viruses as that other operating system, there are still dangers lurking in unknown email attachments and downloaded files. With that in mind, Intego has released **VirusBarrier 1.0**, an antivirus program. One click scans your Mac or any disk or volume. The program, for \$70, works independently in the background and does not slow down the operation of your computer. You can access the program from the Menu Bar at any time. You can also update your virus definitions automatically via the Internet. Intego, 305-868-7920, www.intego.com



Epson's Hot New Inkjets

It's almost impossible to keep up with the wicked-fast improvements in inkjet printer technology. But we feel compelled to share. Epson has come out with a new line of USB color inkjets for both the G3 and G4, and a separate i line for the iMac. The iMac models will be available in October.



Let's start with the **Stylus Color 777/777i**. At a pricetag of \$99, this model gives you a maximum resolution of 2,880 x 720 dots per inch (dpi), printing at 8 pages per minute in black and 7 ppm in color. They come in a range of colors, including iMac colors.

If you're looking for faster print speeds, have a look at the Stylus Color 880/880i for \$149. With a print resolution of 2,880 x 720 dpi, it prints at a rate of 12 pages per minute in black and 9 ppm in color.

Faster still is the Stylus Color 980/980N (that's for Network), which prints at 13 ppm in black and 10.5 ppm in color. The 980N has both USB and FireWire ports, the latter of which is optional in the 980. Both have Ethernet networking capability. No price was available at press time, but both models will be available by the time you read this.

Epson, 800-463-7766, www.epson.com

The Color Orange

If you have a substantial investment in your SCSI peripherals, and you've found yourself with, say, an iMac DV or Power Mac G4 (you poor thing!), you don't just want to toss your stuff out. Instead, you can use the **Orange Converter** from Orange Micro, which gives you a SCSI-to-FireWire converter with a transfer rate of 10MB per second. The converter, for \$99, connects to any FireWire port and converts all SCSI data from your peripheral. You can use the Orange Converter to save a PCI slot by removing any existing SCSI PCI host adapter card.

Orange Micro, 714-779-2772, www.orangemicro.com



All Together Now

If you're in the market for a scanner/printer/fax/copier, Brother says you've come to the right place. The company has introduced three USB multi-function units — the **MFC-7300c** (\$349), **MFC-7400c** (\$399), and the flatbed **MFC-9200c** (\$599) — for a variety of consumer and professional needs. They will be available at the end of September.

While all three models feature a



video-capture port

(NTSC) that lets you print video frames from a camcorder or VCR, the latter two also include both CompactFlash and SmartMedia drives that let you print digital photos directly from the cards without having to boot your computer. Print thumbnails, individual shots, or groups of images. A four-cartridge color ink system is designed to save you money.

Print speeds for the 7300c and 7400c are 12 pages per minute (ppm) for black and 10 ppm for color. The top-of-the-line model prints 14 ppm in black and 12 ppm in color. All print in resolutions of 1,200 x 1,200 dots per inch and let you send and receive color faxes!

The flatbed MFC-9200c, which has all the features of the 7400c, is for those who specifically need the flatbed capability to scan from books and periodicals, and other complex projects.

Brother, 800-276-7746, www.brother.com



Back Up!

Backing up or restoring lost data:

These are things you'll have to do sooner or later. And there are several new products on the market that will assist with this task. Power On Software has introduced **Rewind**, a program for \$100 that will let you recover data that you may have accidentally deleted, or files that got accidentally overwritten. It will be available in the fourth quarter. With Rewind, you can also revert to a previously installed version of your operating system or application. The program can restore overwritten or trashed files, restore damaged files, uninstall applications, recover previous versions of a file, and more. And, if your system crashes, you can use Rewind to get it up and running again.

Another backup scheme you might want to try is **CopyAgent 1.0** from Connectix. This personal backup software, for \$39, is designed to streamline and automate your backups and lets you backup, copy, or synchronize your files automatically. You can either perform copy jobs right away or schedule automatic and unattended backups. The software features security options that allow you to erase files so they cannot be found with recovery software, and automatically delete locked files, bypassing a warning dialog.

Dantz Development, the makers of Retrospect backup software, announced an upgrade to version 4.3. The across-the-board upgrade of Retrospect gives **Retrospect Express Backup** (\$49) the ability to save to hard drives and lets all Retrospect products back up more than 2GB of data to a single hard disk. All Retrospect editions (Retrospect Desktop Backup, for \$149, and Retrospect Workgroup Backup, for \$299) now also support additional USB and FireWire CD-R, CD-RW drives. The higher end versions also support tape drives. Version 4.3 ships with a bootable Mac OS 9.0.4 disk.

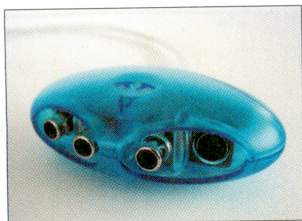
Power On Software, 800-344-9160, www.poweronsw.com

Connectix, 800-950-5880, www.connectix.com

Dantz Development, 800-225-4880, www.dantz.com

Watching U

As more and more of us find the need for audio/visual applications on the Web, a tool that enables full-motion video analog capture comes in handy. Enter the iREZ **CapSureUSB**, a \$100 device that can capture both audio and video from VCRs, video cameras, professional cameras, or stereo receivers, and bring it into your USB Mac. You get 640 x 480 video playthrough with full audio as well as frame grabbing and video capture. You can even



connect a VCR to record home video to your desktop for editing or saving to CD-ROM.

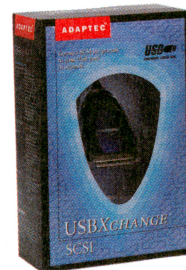
Looking for something to shoot your digital video? Look no further than the **FireWire iREZ KritterDIGITAL**, a full-motion digital video camera for \$200. Housed in a graphite shell, it has a functional "claw" that fastens over the top of any laptop screen or acts as legs on a flat surface. A "wand," which is also included, serves as a stand on which to place the camera.

iREZ (PAR Technologies), 480-922-0044, www.irez.com

Adapt Yo' Self

Do you find yourself awash in SCSI peripherals in this new USB world? Don't fret. Adaptec has introduced **USBXchange**, an \$80 USB-to-SCSI

adapter that lets you connect your old scanners, CDRs, CD-RWs, DVD drives, and more to your USB Mac. It is self-powered by the SCSI bus, USB bus, or external power supply.



Adaptec has also released a new version of Jam, its CD-mastering software for \$199. Version 2.6 now supports USB and FireWire CD recorders and includes MP3-burning capabilities.

Adaptec, 800-442-7274,

www.adaptec.com

All in Order

If you work with lots of digital images you already know how difficult it is to keep track of them.

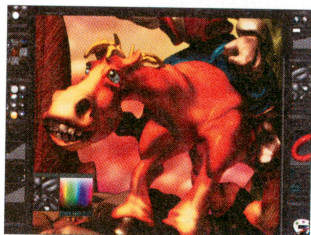
There's a low-cost solution to this problem with **ACDSee**, an image viewer that can display your high-resolution digital images. This product, for \$30, also functions as an image browser that lets you find and organize image archives and movie and sound clips, and supports more than 40 image formats. And hey, it also changes your desktop picture and lets you create a slide show.

ACD Systems, 800-579-5309,

www.acdsystems.com

Painting in 3D

If you're a digital artist or graphic designer, hold on to your hat because there's a new paint tool in town: **ZBrush**. It's not just another paint tool. ZBrush



is a real-time 3D tool that lets you paint with a variety of materials such as plastic, chrome, and wood, and includes adjustable attributes such as ambient, specular, diffuse, transparency, metallicity, and more. You can also do intuitive 3D sculpting, which lets you edit primitive shapes and push and pull points. ZBrush supports both importing and

exporting of images and objects for use in other applications. The program will be available for download from Pixologic's Website for \$299 (half price) for an undetermined amount of time, and \$595 thereafter.

Pixologic, 888-748-5967, www.pixologic.com



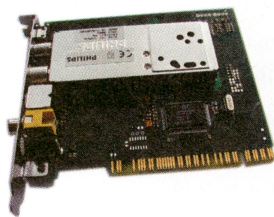
TechTool Pro 3 Arrives

Micromat has announced the new version of its **TechTool Pro** troubleshooting and disk repair utility that tests and repairs your hard drives and software. Version 3, for \$98, adds virus detection/protection and software-conflict detection to the package. The program sports a new interface and gives you improved drive repair and recovery, the company says. It has also improved optimization and system file analysis.

Micromat, 800-829-6227, www.micromat.com

Your Mac a TV?

If you've ever harbored fantasies of watching TV on your Mac while at the same time surfing the Web, have a look at **ProTV** by Formac. This TV tuner and video capture card not only lets you



watch TV while you surf the Web, it also lets you send personal videos to family and friends directly from your Mac. To watch a program, connect to the signal via antenna or cable

and choose up to 125 channels.

ProTV also includes teletext.

For home videos, you can connect to your VCR or camcorder and play or record video in S-VHS and BNC formats. Capture stills and record full-motion video as QuickTime movies, which will play up to 30 frames per second.

Formac, 877-436-7622, www.formac.com

It's a Snap!

Agfa has introduced the **Snap-**

Scan e50, a 42-bit color scanner with a 1,200 x 2,400 dpi optical resolution. This model, for \$199, has a built-in transparency module and four programmable buttons to scan your originals and automatically format them for the Internet and email, word processing, text conversion



(OCR, or Optical Character Recognition), or image editing programs. It can also accommodate 35mm slides. This unit, which connects via USB, ships with interchangeable colored handles and button covers to match your Mac or your paint job.

Agfa, 888-281-2302, www.agfahome.com

Small Networks

Increasingly, families, small offices, and

schools want to share an Internet connection. Farallon's **SkyLINE AccessPoint** is a wireless networking product for this purpose. It supports up to 30 users simultaneously. While it can

accommodate connection speeds of up to 11Mbps, it can automatically support slower connections over an increased distance. The



new SkyLINE PCI card provides wireless networking of up to 11Mbps for your desktop. For those who want to share a wider pipe, such as a cable or DSL modem, Farallon has introduced the NetLINE Broadband Gateway. It works by connecting your cable or DSL modem to an Ethernet network, letting all computers share the same Internet connection. There was no information at press time as to price or shipping date.

Farallon, 510-346-8001, www.farallon.com

Yeah, we're one of those obnoxious over-achieving families.



Turbo Mouse: Runs successful Internet start-up.



Orbit: Handsome champion surfer.



Mouse-in-a-Box: Attending Yale this Fall.

You know the kind. Good at everything. Got it all. Loathed by everyone on the block. But our family's a little different — people can feel good about our success. Because for every generation of Mac® computers — from the venerable Mac Classic to the brand new Power Mac G4 Cube, we've created an equally dynamic generation of input devices people love. Our latest family is the first and only to offer USB and ADB connectivity. Whether you choose our entry level Mouse-in-a-Box®, the Orbit® trackball, or the more advanced Turbo Mouse®, you'll find yourself working smarter and more comfortably than ever. Who knows? Maybe you'll end up inspiring a little envy, too. Find out more about our input devices at www.macfamily.kensington.com.

KENSINGTON.

Smart design at work.

■ With ordinary printers, you see the trees.

■ With our printers, you see the bonsai trees.



YOU'VE GOT TO SEE IT IN

EPSON

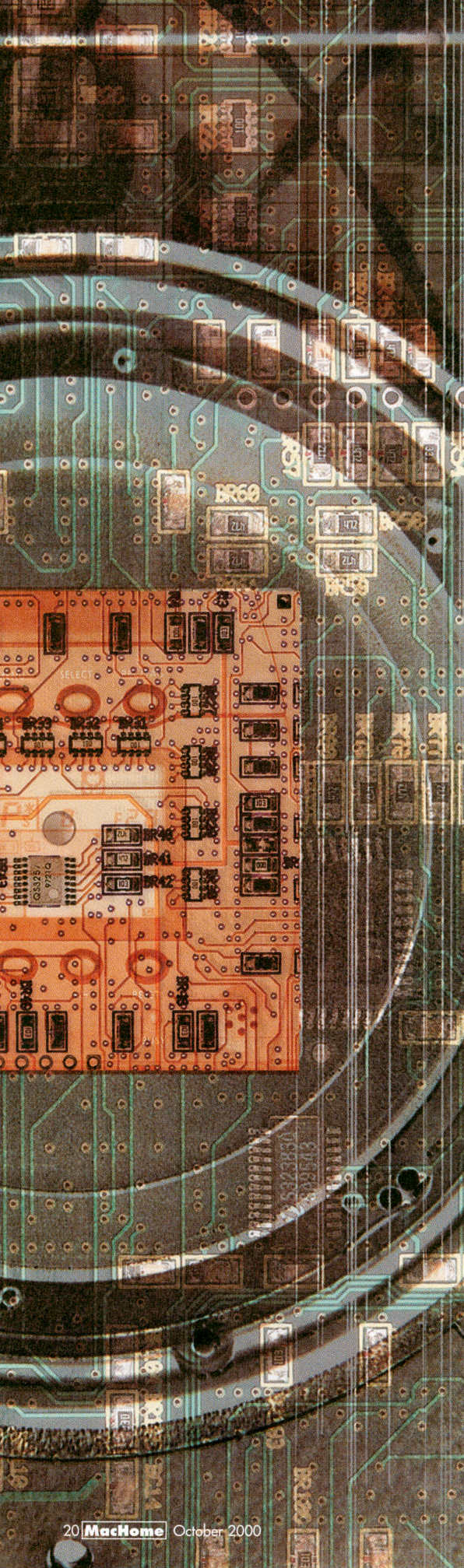
COLOR.



The ladybugs are the clue. See all six? Of course you do. And once you have, you realize what you thought were giant trees are actually small bonsai. Thanks to a tiny detail, the whole picture changes. It's just one example of the extraordinary image quality you get from an Epson printer. With 2880 dpi, there's no color or nuance so subtle it goes unnoticed. And just as you see here, it's those quiet little things that often speak the loudest. Only Epson color ink jet printers have: 2880 x 720 dpi • Micro Piezo technology, for a cleaner, smaller droplet – as small as 3 picoliters • Fast print speeds – up to 13 PPM black/ 10.5 PPM color (with the Epson SC 980) • Quick-drying inks • PC/Mac/USB compatibility. And remember, only Epson supplies guarantee Epson quality. For more info, call 1-800-GO-EPSON or visit www.epson.com.

Epson Stylus Color
Ink Jet Printers.
Sheer brilliance
starting at \$99.





Wild Cards

A Roundup of Processor Upgrades

By the *MacHome* staff

It's no fun: You rush to the store to buy your copy of *The Sims*, only to find that your Power Mac 9500 can't run it — the game requires a 233MHz processor. Time to buy a new Mac? Perhaps. But you might also consider an upgrade card. You can get a 400MHz G3 card for your 9500 for about \$350. But cards have their limitations. So what do you do? Follow as we take you on a whirlwind tour of these speed-inducing gizmos.

Upgrading Versus a New Mac

Keep in mind that your Mac contains many important, interrelated elements besides the processor. If you put a 400MHz G3 card into a Power Mac 6100/66, it's going to run considerably slower than a 400MHz Blue-and-White G3. That's because the 6100 has a much slower system bus (which shuttles information back and forth between the processor and the rest

of your Mac) and less video memory (so text will scroll much more slowly). It will also have a slower CD-ROM, and most likely it will have a slower hard disk and have far less RAM. But, you will be able to run software with stricter processor requirements. If you wanted to upgrade all of the individual components, then it's probably time for a whole new Mac.

Newer Technology, one of our four featured processor card manu-

facturers, has put up a new online service that compares the expected performance of different configurations of Macs — those with native processors and those with cards. It's called SpeedBench (www.speedbench.com), and it should be available by the time you read this.

If you do decide to upgrade, first add as much RAM as you can. Then increase the RAM allotment to your most sluggish applications, and observe the difference. Don't hinder your fast processor with a narrow RAM allotment.

The Many Faces of Mac

So, first take a look at what kind of Mac you'd like to upgrade. There is a card out there for just about any Mac available. If you're working with a 6100, then you'll need a card that fits the NuBus format. Later machines use PCI cards, and the newest ones use ZIF (zero insertion force) cards that, as the name implies, can be snapped right into your Mac's circuitry — without having to forcibly push it in. XLR8, another purveyor of processor upgrade cards, also produces a ZIF "carrier" card. Such a card fits into the CPU slot present in the older 604 processors, and some of its predecessors. If you have an iMac, yes, you can upgrade as well. Though the iMac lacks expansion slots, Newer Technology has figured out how to trick out this little all-in-one with a processor upgrade that fits underneath the motherboard.

G3 or G4?

So, you've decided to upgrade. Do you upgrade to a G3 or a G4? A G4 processor is much, much faster than a G3, but only at certain specific tasks. If you do a lot of graphic design, and running effects in Adobe Photoshop is how you fill your days, then you certainly want to go to a G4. You'll also want to go that route if you spend a lot of time compressing digital video.

But G4 upgrade cards have very special requirements above and beyond those of G3 cards. Particularly, they can be especially sensitive when you perform a little maintenance maneuver called "Zapping the PRAM." The PRAM (or Parameter RAM) sits on the motherboard and stores parameters for functions such as Ethernet, Date and Time, and monitor resolution. Zapping the PRAM can be an effective way of eliminating any number of hardware problems. (To do this, by the way, hold down all four of the Command, Option, P and R keys on restart and wait for about three chimes. Don't forget, after you do this, to reset your Ethernet settings.) If you zap the PRAM on a machine with a G4 card, there is a chance that your machine won't start up. Each manufacturer has its way of getting around this — Newer, for example, avoids storing critical information in the PRAM, while Sonnet provides a "PRAM Startup Disk" for just such an occurrence.

The OS X Question

Apple states that OS X will only run on native G3 or G4 Macs, not those that have been upgraded to G3 or G4 status. Although it's possible that upgrade card manufacturers might find a way for their cards to support OS X on pre-G3 Macs, as of press time the word is that if you've got a pre-G3 Mac, or a clone, and you want to move up to OS X, then this might be the time to invest in a brand-new Mac.

Meet the players

We tested out cards from Newer Technology, PowerLogix, Sonnet Technologies, and XLR8. When shopping for an upgrade, the main considerations are compatibility and price. Aside from these differences, you might want to consider a card that doesn't use System extensions, because the chances of compatibility with your other software will be higher. Also, some cards are easier and more intuitive to set up.

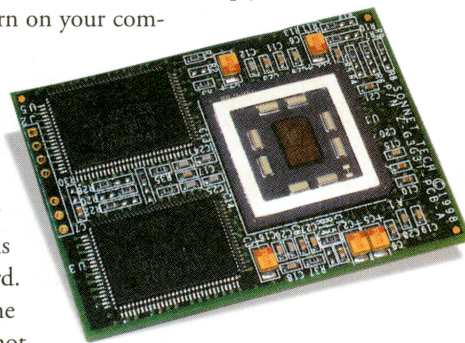
Some allow you to drive the card to higher speeds by means of a process called "overclocking." If you love to tinker, and you love taking risks, it is possible to experiment with overclocking if your card supports it. But we at *MacHome* recommend playing it safe — we like to spend our time using our Macs rather than troubleshooting them.

Sonnet Encore G3 500MHz

Installing upgrade cards — any cards for that matter — can make even self-described techies a bit nervous. There is the fear that you might lose all of your information, short something out, or that the card simply won't work when you turn on your computer. Fortunately, opening up a Blue and White G3/400MHz presents you with very little to worry about; everything is very straightforward.

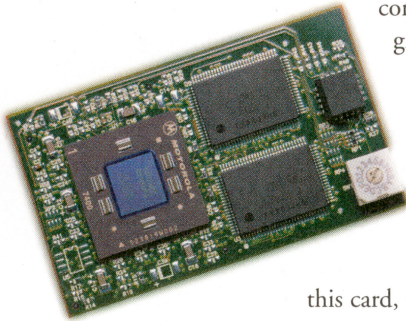
Installation of the Encore G3 could not have been easier thanks to a good set of instructions. There were very good pictures and well-written text to lead you through the process. Although there is no grounding device included, the instructions put you at ease, suggesting that you simply touch the metal shielding on the G3's power supply box.

Because there is no software or firmware to load, you only need to remove the old chip, with the help of a flat-head screwdriver, and install the new ZIF chip. Once you close the computer and reconnect the plugs, simply restart your slower G3 and presto — you have a 500MHz G3.



PowerLogix PowerForce G3 ZIF

This card was simple to install: Just drop it into place. However, make sure that you configure the switch setting correctly for your system as this will allow optimal performance. There are no DIP switches, but rather a small wheel that you can adjust with a flathead screwdriver.



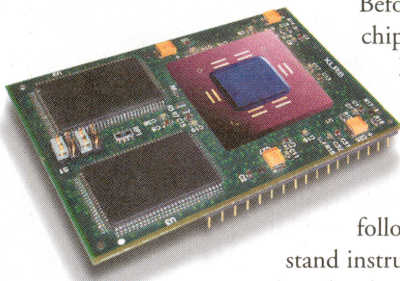
This card came with a G3/G4 cache profiler, a control panel designed to give you detailed information about your motherboard, processor, and cache systems. No anti-static grounding strap came in the box, so if you buy this card, you are expected to procure one on your own.

PowerLogix places software in your Extensions folder and in a separate folder on your hard drive. Even though the black and white instructional images were kind of small, the manual was fairly easy to follow.

There is no question that simple tasks are faster and that we were more productive zipping along at 500MHz as opposed to 233MHz. This is a noticeable speed boost if you are operating processor-intensive programs such as Adobe Photoshop.

XLR8 G3 500

The XLR8 card comes packaged with a variety of helpful tools for installing your new ZIF chip. To start with, the chip comes in its own plastic box, which is nice when you are trying to keep it from getting damaged, and it makes a great place for storing your old card. There is also a small toolkit that includes a flathead screwdriver, a very nice grounding device, and some Thermal Grease to increase heat transfer between the chip and the heat sink above it. XLR8 has included a Popsicle stick to apply the grease with as well — nice touch.



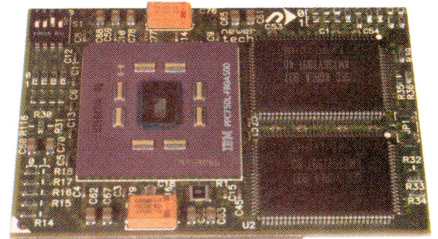
Before you install the chip, you will need to load XLR8's G3 Control software onto your G3. Once you have done this, you then

follow the easy-to-understand instructions in the manual to replace the chip. Be sure to note the configuration of the "jumpers" on the edge of the card. These are four pin-like devices that must be set at a specific configuration so that your new card will operate at the correct speed within your computer's parameters. If they are set incorrectly, your computer won't restart.

Newer Technology MAXpowr G3-G3

We were very pleased with the performance of the MAXpowr G3-G3 from Newer Technology. Software includes the MAXpowr Control Panel, which gives you a variety of backside cache options. Handy-dandy Gauge Pro software also comes with the Newer upgrade. This small utility gives you all kinds of system information.

A warning: Be very careful in setting the DIP switches for this card. We recommend using a magnifying glass to find the On orientation and then observe the DIP switch numbers, as they are small and can be difficult to see. Move the DIP-switch settings strictly according to your Mac model. This can be tricky, so pay attention and make sure that the card is set up appropriately. If you make a mistake, no problem, you'll just have to open up your box again and re-do it. Don't worry about damaging your Mac.



The MAXpowr comes with a rather flimsy paper anti-static wrist strap, which did not inspire confidence. However, if

that's all you have, just be sure to follow directions and you'll be fine. (We actually used XLR8's ultra-sophisticated grounding wire that plugged right into the power source.)

There was no special set-up required in order to install the MAXpowr upgrade. The software included a system extension and control panel. The Newer documentation, in the form of a glossy book, was very complete. There wasn't much to read, but if you are unfamiliar with the innards of your desktop G3 or Minitower, you will appreciate the large, clear, black-and-white photographs.

The actual installation of the card is as painless as this process is going to get. As for performance, there was a noticeable speed bump on ordinary tasks such as launching applications.

Pick A Card

Upgrading your Mac is always a tradeoff between the efficiency with which you work or play, and price. While there's no appreciable difference in performance between the cards we tested, ease of installation and setup are major considerations when choosing which card to buy. Each of the cards we tested will fit the bill, but the one from Sonnet stood out because of both price and ease of installation. Below is a complete listing of the other upgrade cards available from our featured manufacturers. **MHJ**

are you digital yet?™

©2000 Canon U.S.A., Inc. "are you digital yet?", PowerShot, ELPH and Canon Know How are trademarks of Canon Inc.

Any camera can be digital.
Only one can be an ELPH.



- The world's smallest, lightest, 2 megapixel digital camera with zoom lens.
- High-speed USB interface and video out.
- Comprehensive software bundle, fully compatible with Mac and PC.
- Accepts Type I CompactFlash™ memory cards.
- Built-in flash.
- All-glass aspherical Canon 2x zoom lens and 4x digital tele-converter.

PowerShot S100
DIGITAL ELPH



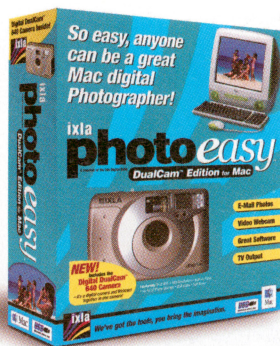
www.powershot.com

Canon KNOW HOW™

“You know, you can afford to e-mail your Nana a picture once in a while!”



Get a complete Mac Digital Photography package for under \$150!



USB

Includes Corel® Custom Photo software, Canto Cumulus 5.0 LE, and IXLA's new Digital DualCam 640™ camera. True 640 x 480 resolution, store up to 32 photos, built-in flash, TV output, video enabled, USB cable, focus-free lens, and self timer.

Stop by for a chance to win one of the coolest chairs on the planet by

BODYBILT

No purchase necessary.

Special Limited Time Offer!

Free
Camera Case!



Limited Supplies
CASE LOGIC

Get a **FREE** Camera Case with your purchase!
Quote Code:4954

Visit IXLA at Macworld Expo



Booth #2105
Jacob Javits Center
NYC July 19-21



To find out more about ixla Photo Easy DualCam Edition for the Mac, visit our website at www.ixla.com or call 800-881-2966.



Manufacturer	Card	Price	Rating	Compatibility
NewerTechnology 316-943-0222 www.newer technology.com	MAXpowr G3 6100 300-333MHz	\$349		PDS
	MAXpowr G3 7100/8100 266-300MHz	\$449		PDS
	MAXpowr G3 400	\$349		PCI
	MAXpowr G3 500/	\$549		PCI
	iMAXpowr G3 466	\$349		iMac
	iMAXpowr G4 433MHz	\$549		iMac
	MAXpowr G3-L2 400	\$399		L2 Cache Socket
	MAXpowr G3-G3 500	\$549		ZIF
	MAXpowr G4 400	\$549		ZIF
	MAXpowr G4 450	\$679		ZIF
	MAXpowr G4 500	\$799		PCI
	MAXpowr G4 350/175	\$449		PCI
	MAXpowr G4 400/200	\$599		PCI
	MAXpowr G4 450/225	\$699		PCI
Powerlogix 877-849-2504 www.powerlogix.com	PowerForce G3 350/175/512K	\$199		PCI
	PowerForce G3 400/200/1Mb	\$299		PCI
	PowerForce G3 500/250/1Mb	\$489		PCI
	PowerForce G4 400/200/1Mb	\$529		PCI
	PowerForce G4 450/225/1Mb	\$845		PCI
	PowerForce G3 500/250/1Mb	\$489		ZIF
	PowerForce G4 400/200/1Mb	\$529		ZIF
	PowerForce G4 450/225/1Mb	\$845		ZIF
	iForce G3 400	\$299		iMac
	iForce G3 500	\$499		iMac
	Blue Chip G3 500	\$699		PowerBook
Sonnet Technologies, Inc. 949-261-2800 www.sonnettech.com	Crescendo G3 250MHz	\$199		L2 Cache Socket
	Crescendo G3 300 MHz	\$250		L2 Cache Socket
	Crescendo G3 350 MHz	\$350		L2 Cache Socket
	Crescendo G3 400 MHz	\$400		L2 Cache Socket
	Crescendo G3 500 MHz	\$600		L2 Cache Socket
	Crescendo G3/L2/512K/2:1/250 MHz	\$200		L2 Cache Socket
	Crescendo G3/L2/512K/2:1/300 MHz	\$250		L2 Cache Socket
	Crescendo G3/L2/1M/2:1/350 MHz	\$350		L2 Cache Socket
	Crescendo G3 250 MHz	\$200		NuBus
	Crescendo G3 240-266 MHz	\$250		NuBus
	Crescendo G3 300 MHz	\$300		NuBus
	Crescendo G3 400 MHz	\$400		NuBus
	Crescendo G4 360 MHz	\$500		NuBus
	Crescendo G3/PB/512K/2:1/333 MHz	\$400		PowerBook
	Crescendo G3/PB/1M/2:1/333 MHz	\$500		PowerBook
	Crescendo G3/PB/1M/2:1/400 MHz	\$500		PowerBook
	Crescendo G3 266 MHz	\$130		PCI
	Crescendo G3 300 MHz	\$160		PCI
	Crescendo G3 333 MHz	\$170		PCI
	Crescendo G3 375 MHz	\$200		PCI
	Crescendo G3/PCI/512K/3:1/400 MHz	\$250		PCI
	Crescendo G3/PCI/1M/2:1/400 MHz	\$300		PCI
	Crescendo G3 500 MHz	\$500		PCI
	Crescendo G4 350 MHz	\$400		PCI
	Crescendo G4 400 MHz	\$550		PCI
	Crescendo G4 450 MHz	\$650		PCI
	Encore G3 500 MHz	\$500		ZIF
	Encore G4 400 MHz	\$550		ZIF
	Encore G4 500 MHz	\$800		ZIF
XLR8, Inc 800-513-9744 www.xlr8.com	MACHCarrier G3 333	\$319		CPU Slot
	MACHCarrier G3 400	\$409		CPU Slot
	MACHCarrier G3 450	\$539		CPU Slot
	MACHCarrier G3 500	\$679		CPU Slot
	MACHCarrier G4 350	\$599		CPU Slot
	MACHCarrier G4 400	\$679		CPU Slot
	MACHCarrier G4 450	\$779		CPU Slot
	MACHCarrier G4 500	\$929		CPU Slot
	MACHSpeed G3 333	\$299		ZIF
	MACHSpeed G3 400	\$369		ZIF
	MACHSpeed G3z 333	\$279		ZIF
	MACHSpeed G3z 400	\$359		ZIF
	MACHSpeed G3z 450	\$489		ZIF
	MACHSpeed G3z 466	\$489		ZIF
	MACHSpeed G3z 500	\$609		ZIF

The 2001 MHJ

READERS' CHOICE

Vote for your favorite Mac products!

You've heard us go on and on about our favorite Mac stuff. But enough about us! We want to hear what you have to say. Visit the MacHome Website and vote on your favorite Mac hardware and software, or, make a copy of the facing page, and mail it on in!

The Mac community values your opinions. Alright, you need further incentive? How about this then — we will choose 8 winners at random to win a fabulous prize!

Good luck and cast your vote!

To make it as easy as possible, we've set up our Website to take your votes. Just go to

www.machome.com/vote.html

and fill out the easy form, or mail in the form on the right. You can pick any Mac products you want.

Entries are due by midnight, November 15, 2000.

Mail this form to: Readers' Choice 2001

703 Market Street, Suite 535, San Francisco, CA 94103

or fax this form to: 415.882.9502

Vote and Win!

Note: You don't have to fill in every category. One entry per person. Winners will be randomly chosen from all completed entries. Responses are confidential, and your name is only used for contest drawing eligibility. All entries must be received by midnight November 15, 2000.

Name: _____ Email: _____ Phone: _____

Address: _____

What kind of Mac do you have? _____

Desktop Computer _____	Web Authoring Program _____
Portable Computer _____	System Enhancement _____
Palmtop Computer _____	Internet Service Provider _____
Flat-Panel Monitor _____	Utility _____
CRT Monitor _____	Accessory _____
External Modem _____	Business Software _____
Input Device _____	Finance Application _____
Scanner _____	Creativity Application _____
CD-R, CD-RW _____	Music Software _____
Digital Camera _____	Learning Software _____
Camcorder _____	Kids Creativity Software _____
Graphics Card _____	Adventure Game _____
Upgrade Card _____	Simulation Game _____
Color Inkjet Printer _____	Strategy Game _____
Monochrome Laser Printer _____	Action Game _____
Removable Storage _____	Fantasy Game _____
Word Processor _____	Best Overall Hardware Product _____
Email Program _____	Best Overall Software Product _____
Browser _____	Other _____

READERS' CHOICE () AWARDS

Auto-Mac-Tic home

Control Household Appliances from Your Mac

By Jeff Battersby

You've been using your Mac for quite some time now, and what have you been doing? Word processing? Playing games? Designing Websites or databases? Your Mac is a powerful and exceedingly capable machine, why not use it to launch you into the glories of a sedentary life? Using the powerful Thinking Home software, an X-10 interface module, and a few X-10 devices, you can control everything in your house. From coffee makers to televisions, or from lighting to stereo equipment, you can automate just about anything you'd like, making your life that much simpler.

X-10, Hardware and Software

Before we begin, we need to introduce you to the hardware and software you'll be using to automate your home. (See *Getting the Goods*, below, for info on where to find it.) If you've ever used a standard light timer, then you'll be treading on familiar territory here. X-10 hardware, which we'll be using to control our lighting and appliances, looks and behaves like a normal light timer, only it's much smarter. X-10 uses the electrical wiring in your home or office to send commands or receive information from a multitude of devices. The device that sends commands and receives information is usually referred to as the Interface. The device that receives the commands is typically called the Module.

The software we'll be using is Always Thinking's Thinking Home software. (You can download it from www.alwaysthinking.com.) While it's possible to control any module using a physical remote control, using software allows you to turn your lights on or off depending on specific events. For

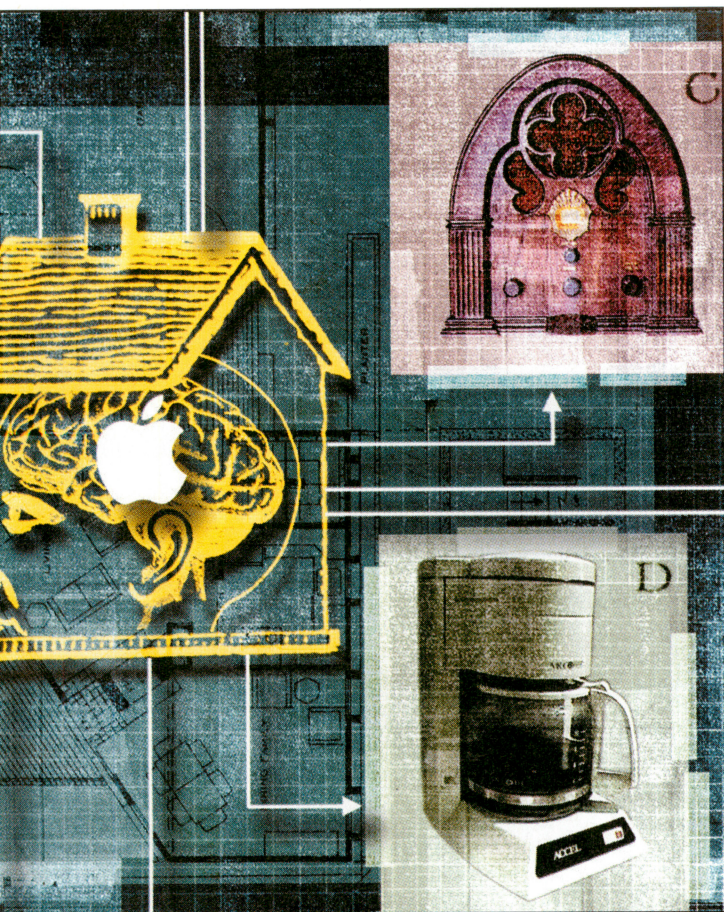
example, using an X-10-capable motion detector, you can cause the lights to switch on whenever someone walks into a room, and then automatically turn off after a certain period of time if no more motion is detected. Also, if you're going to be away on vacation, you can program the lights in several rooms to go on and off at various intervals, giving the impression that someone is actually living in your house.

Activating Your Home

Before you begin programming your house you'll need to make sure all the hardware is set up correctly. To do this you'll need to follow the instructions that came with your hardware, paying close attention to your House Code (usually "A") and the Unit ID for each Module.

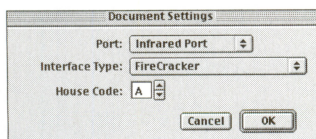
Depending on the number of modules you have, you may want to write this information down. For the sake of this tutorial we'll make our House Code "A" and our modules 1 and 2. Module 1 will be





connected to a desk lamp and Module 2 will be connected to a radio. In both cases you'll want to make sure that both devices are turned on before you plug them into the Module. You'll also need to plug your Interface (we used a FireCracker) into an available serial port on your Mac. (Remember, you shouldn't plug anything into your Mac if it's turned on. Turn it off first, plug in the Interface, and then turn it back on.)

When you're done, open up the Thinking Home software and create a new Thinking Home document. As soon as your new document



window opens you'll be asked select the port that your Interface is connected to,

the type of Interface that you're using (for example, a FireCracker), and the House Code that you're using. (In our case, "A.")

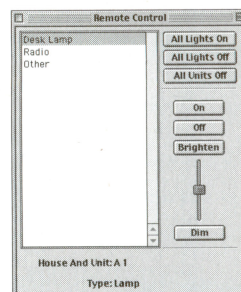
Now it's time to add some devices. Open the File menu and select New Device from the submenu that appears. You should now see an item titled "New Device" that appears in your Thinking Home document window. Thinking Home gives this device an address of A1 by default. Double-click this device and you'll

see the Edit Device window. Change the name of the device to Desk Lamp and then choose Lamp from the Type pop-up menu. Make sure the address reflects the address of the device you've chosen. When you're done, click OK and then create a second device called Radio. The type for this device should be Appliance, and you can click the Icon button to change the icon to a radio. Again, verify that the House Code and Unit ID are correct, then click OK.

Tune In, Turn On, Flip Out

It's time to take control. Select the Interface Menu and choose Remote

Control, or press Command-R. The Remote Control window should now appear. Select the item titled Desk Lamp and look at the buttons available on the Remote Control. You should note that you have several options when the Desk Lamp is selected, which include turning the lamp on or off and brightening or dimming the lamp. Now click on the item titled Radio. Now you should only have an On or Off option. Reselect the Desk Lamp and press the On button. You should immediately see the light go on. (Of course, if the light was already on, nothing will happen. You should press the Off button instead.) Now use the Dimmer Slider to dim or brighten the light. (Note: Be gentle with this slider. If you move the slider too quickly, it can take a while for the Interface module to respond to the next command.) Now select the Radio and turn it on or off. Pretty simple, huh?



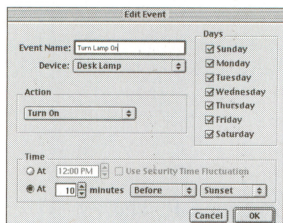
Super Automation

Now's when the real fun begins — creating automatic schedules for your house. (Note: the FireCracker is incapable of running or storing schedules. If you have a

FireCracker and you still want to create schedules, see the "Creating Schedules for a FireCracker" sidebar.)

To create a new schedule, select the Desk Lamp and then choose New Event from the File menu. A new item called "New Event" will appear beneath the Desk Lamp. Double-click the event to edit it. You should see the "Edit Event" window appear. Change the Event Name to "Turn Light On," then from the Action menu select the item that says, "Turn On." You should now





select the time that you want this event to occur and the days when you

want this event to run. When you're done, click the OK button. Now create three more events, one to turn the Desk Lamp off and one each to turn the Radio on and off. When you've completed all your schedules, and if you're using one of the interfaces that can store schedules (see the "Interface" sidebar), select "Store In Interface" from the File menu and your schedules will begin running automatically.

Getting the Goods

Amazingly, you can actually get a basic X-10 starter kit for a paltry \$6. This covers the cost of shipping and is designed to get you hooked on X-10 technology and keep you coming back for more. This special deal can be found at www.x10.com. Here's what you'll get for \$6: FireCracker — this is the interface device that connects to your computer and controls the X-10 modules; one transceiver module to receive commands from the FireCracker and control one non-appliance device; one standard module for controlling one non-appliance device; and one hand-held remote control for switching devices on and off without a computer.

Two caveats apply here. First, when you order, you'll also need to request

a special cable that allows the FireCracker to connect to your Mac's serial port. (The FireCracker is really designed for PCs.) Second, if you own a newer Mac that only has USB ports and lacks a serial port, you'll need to order the ActiveHome kit from X-10. (Sorry, this one costs about \$50.) That's because the FireCracker isn't capable of working with USB. You'll also need to buy a USB-to-serial-port adapter, which you can get from Keyspan (www.keyspan.com).

You can pick up a demo copy of Thinking Home software at www.alwaysthinking.com. If you decide to keep the software, or if you want to enable some of the program's more advanced features, you can purchase Thinking Home for about \$40. You can also get a connector cable from Always Thinking as well.

If you can't wait to have all this stuff shipped to you, you can pick everything up from Radio Shack under the name "Plug 'n Power." But it's a bit on the pricey side.

Zap!

With the proper gear, you can do far more than just turn lights on and off. You can also control cameras, adjust thermostats, respond to motion detectors, or make sure that the coffee maker gets turned off by 9 a.m. Hey, with your Mac, Thinking Home, and a little X-10 hardware, you may never need to lift another finger. Now *that's* what you bought your Macintosh for! **MHJ**

Selecting the Proper Interface

You can get a FireCracker for free, but it lacks several capabilities that you may find necessary if you really want to automate your home, such as storing schedules and macros,

Device Name	USB Capable?	Other Capabilities
CM-11	Yes*	Stores events and macros
HD-12	Yes*	Stores events and macros
CM-10	Yes*	Stores macros
CP-290	Yes*	Stores events
FireCracker (CM-17)	No	Stores nothing

*Requires a USB-to-serial-port adapter

other interface devices that you can purchase and their capabilities.

Creating Schedules for Your FireCracker

While the FireCracker

is an inexpensive way to get started in home automation, it has no memory and lacks the ability to store and run schedules. Fortunately, if you're willing to master some very rudimentary AppleScript skills and leave your Macintosh running all the time, you can still create and run schedules using the FireCracker. Just download a copy of the free iDo Script Scheduler from www.sophisticated.com. Then use iDo Script Scheduler to turn your Desk Lamp — or any other device you've created — on or off.

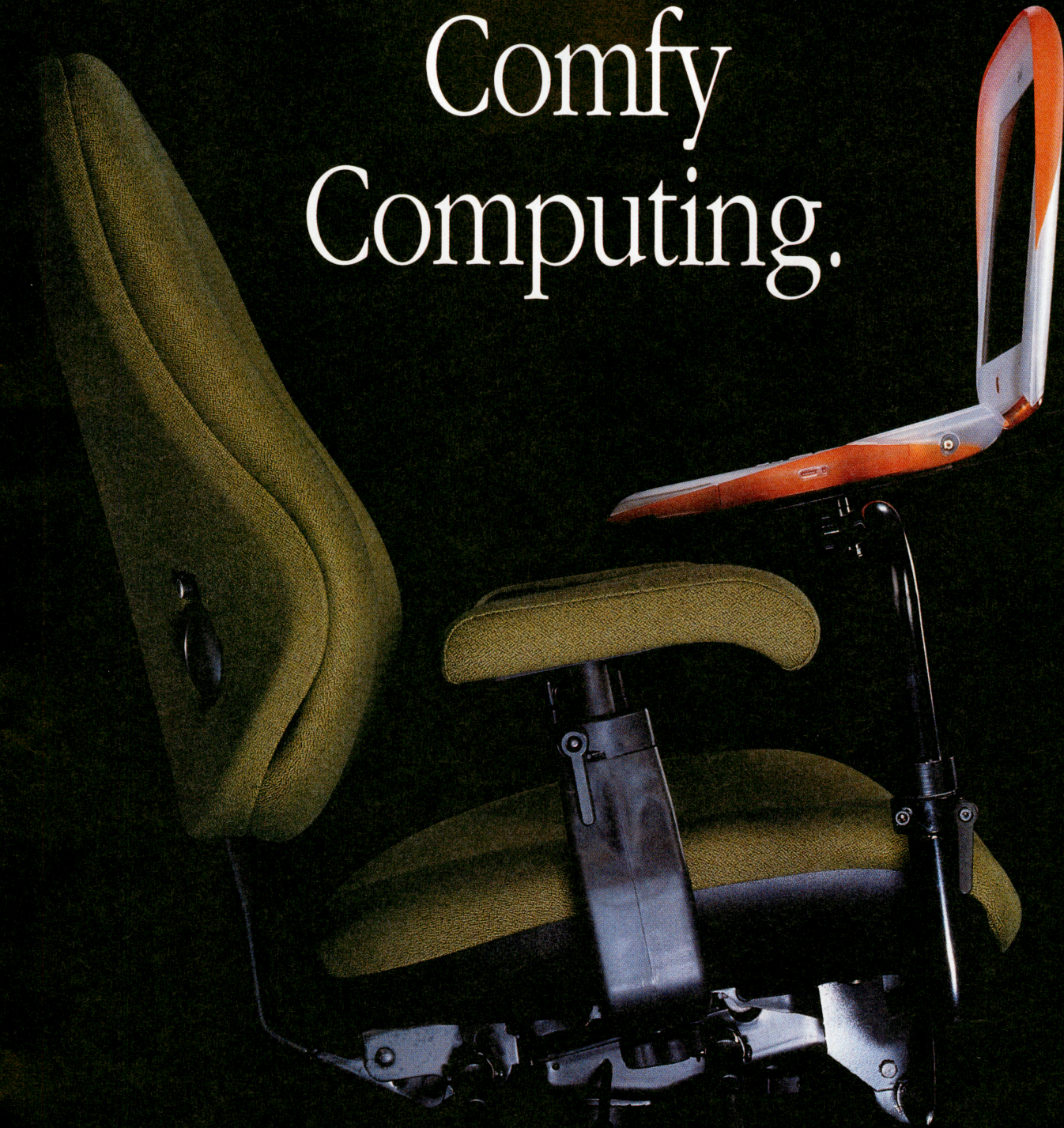


Here's how:

First, create and save an AppleScript just like this: tell application "Thinking Home"/Turn On the "Desk Light"/end tell (See, I told you it was rudimentary AppleScript skills!) Now, to create another script that turns off the light. All you need to do is copy the first script, change the "On" to "Off," save the script, and you're done.

Now open the iDo Script Scheduler and create a new schedule using your newly created script as the script to run. Then make sure that Thinking Home and the document with the Desk Light device is open. iDo Script Scheduler will work in conjunction with Thinking Home and the FireCracker to automate your home.

Comfy Computing.



Wouldn't it be great to have a chair you could love as much as your Mac? Wouldn't it be great to sit at your Mac with no back pain? BodyBilt chairs were designed from the study of astronauts resting in the weightlessness of space to determine the body's preferred posture. Ten adjustable features and a unique, pressure-reducing seat contour to help you emulate that natural, stress-free position in the comfort of your own home...or office...or both. For more information on BodyBilt chairs, visit www.bodybilt.com or call us at 800.364.5673. When you purchase a BodyBilt chair with our unique X-Tension™ Arm option, shown in this ad, we'll send you a free Ixla Photo Easy DualCam digital camera! Included is the Digital DualCam 640 camera, software, cables for both TV/Video & USB – even the 2 AA batteries to start taking digital pictures right out of the box. Be sure to specify MAC or PC when you order your chair.



BODYBILT

From Space To The Workplace





Apple's Core Curriculum

Macs **Are** Serious School Tools

By Carolyn Blackburn

Mac computers hold prominent positions in many classrooms. Stretching from coast to coast, they serve to enhance the learning environment of students from kindergarten through college. Read on to find out how educators and students take advantage of Apple technology.

Gaia Crossroads Project

West Boothbay Harbor, Maine

Since 1990, the Gaia Crossroads Project, an education program that uses satellite imagery as a resource for learning and community awareness, has been going — and growing — strong.

“When we began the project in 1990, most of the students and teachers had never worked with a computer as powerful and exciting as the Mac IIci or IIsi,” says Cyndy Erickson, Gaia Crossroads’ project director. “The intuitiveness of the Mac platform and the excitement of exploring satellite images form a magical combination that captivates students.”

Projects for grades K through 12, including creating neighborhood maps, plotting the effects of sea level rise on local areas, and explaining images of seasonal changes, among others, give students a hands-on approach to science education.

The program wouldn’t have been possible without the technological advances of the recent past. “The integration of technology into the classroom has been astounding,” says Erickson. With tools including Apple computers and GAIA satellite imaging software (developed for the Mac particularly for the Gaia Crossroads

Project), the project’s community has blossomed. Now in its eleventh year, the project has trained 144 teachers, bringing the use of satellite imagery to more than 49,000 students in Maine and New Hampshire. The majority of students have computers in their classrooms, and 90% are Macs of varying models, depending on each school’s budget.



A few years back, NASA administrator Dan Goldin visited a couple schools participating in the Gaia Crossroads Project. He was impressed with the project, and in particular with the students. "Seeing kids work is inspiring," he says. "It gives one hope for the future. Although it's become a cliché, it's nevertheless true: Think globally, act locally." www.bigelow.org/-gaia

Media Kids

San Francisco, California

Two years ago, Rita Yee, an instructor at the College of Education at San Francisco State University, and freshman students enrolled in one of her multimedia courses, developed the Media Kids Project. The project is designed to train undergraduate students as computer tutors for the K-5 classrooms at Sanchez Elementary School, also in San Francisco.

A grant from Apple's Partners in Education program outfitted the Cahill Learning Resources and Media Lab at San Francisco State University — where future tutors hone their skills — with Power Mac 5500s and iMac DV SEs. There are Power Macs in each classroom at Sanchez Elementary, as well as an iMac lab. "They're easy to install and set up for our various training programs and after-school activities," says Yee. "Teachers enjoy Macs because the interface is easy for the students to use, and because they can create a variety of lessons that engage the children's learning."

In addition, Media Kids trains freshmen to develop interactive bilingual reading and social studies activities for the elementary students. "The project addresses the digital divide issues that confront our immigrant communities," says Yee. "Final class projects include creating an interactive media activity that incorporates the cultural and linguistic diversity of our San Francisco student population."

At an annual media showcase, where children display their multimedia projects, parents come to praise their children and the teachers and tutors. The festive evening includes media project topics such as narrative stories using clay animation, as well as various science and social studies projects. Nothing like a celebration of young minds! (Look for Media Kids Website this fall.)

Our Place in the Universe

Green Bank, West Virginia

Green Bank Elementary-Middle School resides on property owned by the National Radio Astronomy Observatory — which creates and maintains huge radio dishes and electronics for the use of astronomers all over the world — in Green Bank, West Virginia. Lisa Wayne, a teacher at the school and a part-time employee at the Observatory, and Sue Ann Heatherly, the Education Officer at the Observatory, applied for and received an Apple Partners in Education grant to get the Our Place in the Universe project off the ground. "We began to brainstorm ways to bring the world of the astronomer into kids' lives at Green Bank school," says Heatherly.

Their early brainstorming sessions paid off. The six-week project for seventh graders, created by the entire middle school staff, is three years old now, with no signs of slowing down. The students form teams and are given research projects in which they must investigate a constellation, therefore using astronomy as the theme under which they study math, science, language arts, and social studies. Students receive guidance from an astronomer or advisor from the Observatory, and use telescopes to aid in their study of sky and Earth. When they've completed their field work, students prepare colloquium-style presentations using Power Mac 5500s, G3s, and HyperStudio. "Students love the research, the interrelated nature of the learning, and creating the presentations. Apple technology makes their learning more fun, especially on the creative end of things," says Heatherly.

"Our kids, from this very rural area, were expressing the belief that they didn't need an education. One student said that all he needed to know to succeed in life was how to "cut on the mark," which refers to the marks made on timber before it's

cut — logging is a big part of the local economy," explains Heatherly. But with the help of enthusiastic educators, the students in Green Bank embrace their education more fully, take pride in their community and its contributions, and realize the sky's the limit. www.gb.nrao.edu

The Ports Project

Seattle, Washington

Several years ago, the dedicated teachers at Mercer Middle School, located on the south end of Seattle's Beacon Hill — a lower-income section of the city — felt they were losing the education battle with their students. Stemming from the fact that the student population at Mercer is ethnically diverse, including immigrants or first-generation Americans with strong international ties, teachers Gretchen Coe and Anne Fitzpatrick founded the Ports Project.

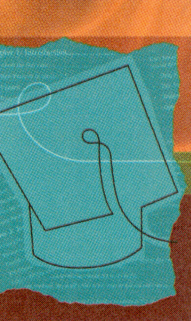
"Our kids need to appreciate the richness of their diversity," says Fitzpatrick. "The Ports Project brings a global education to kids who can easily see its connection to their lives, and it gives Mercer students a framework for looking at local and global communities, current events, history, culture, and their relationship to it." The goal is that students embrace their roles as "port citizens," which involves learning about the economics of trade and about the cultures of the people their port trades with.

Beginning its fourth year this fall, the Ports Project was seeded by a New Connections grant from Apple. Most classrooms now have three computers, including Power Macs and G3s, as well as three iMacs that they've set up on wheels to serve as a mobile lab. "Teachers sign up for the use of

the iMacs, that way they can have six Macs at a time in their classroom, which is a wonderful way to maximize limited technology," explains Fitzpatrick.



Students from Seattle's Mercer Middle School are port citizens.



“I hope I am teaching my students and teachers that learning can never stop.”

— Don Henderson

With the Macs, Fitzpatrick says students develop a “personal global perspective.” They have email partners from port cities around the world and they invite international visitors into their classrooms. They also have a personal Website, with primary upkeep conducted via HyperStudio.

Teachers at Mercer have succeeded in so many ways, including renewed student enthusiasm and higher standardized test scores. “It wasn’t one of our objectives, but we believe that the Ports Project has increased attendance, and therefore students are learning more,” says Fitzpatrick. Once referred to as the “toughest middle school” in Seattle, students now consider Mercer among the most welcoming.

www.t3.ssd.k12.wa.us/ports

Classroom Quizshow

Rockdale County, Georgia

Regardless of whether his school is equipped with Macs or PCs, teacher and game author Steve McNutt will bring his own Power Mac 7500 (upgraded to 604/233MHz/128MB), along with lesson plans and books, into his fourth grade classroom at Flat Shoals Elementary in Rockdale County, Georgia. He needs it there to play *Classroom Quizshow*, the game he created for his students to “avoid boring them to death.”

Kidding aside, he’s found that the game has entertained his students for five of his seven years of teaching. Typical pre-test drills have become a blast for McNutt and his students. “I created *Classroom Quizshow* with hopes of better-engaging my students in learning,” McNutt says. “I thought about game shows in which people had a lot of fun answering questions — essentially the same activity my students often engage in in class with considerably less enthusiasm.”

The game was created on a Mac, for Macs (he also has a G3, but it stays at

home). “I used HyperCard to create my programs,” he explains. “I prefer the Mac platform because its graphic user interface is more intuitive than Windows. The Mac OS simply looks better than the Windows environment.”

The game is designed to accept questions of various educational levels — teachers from kindergarten through medical school have bought and used McNutt’s program in their own classrooms — and formats, including multiple choice and fill-in-the-blank. If I were



Students from San Diego’s Grossmont High School work on a project in their multimedia classroom.

asked to complete the sentence, “Steve McNutt is an _____ teacher,” two words would quickly spring to mind: inspiring and inventive.

www.classroomquizshow.com

Multimedia Communication Arts

San Diego, California

Classes including 3-D Design, Animation, and Web Design — part of Grossmont High’s Multimedia Communication Arts career pathway — have become so popular and well-received that the San Diego school is currently transforming the program into an academy within the school. “Students will explore various career opportunities while still

meeting the entire necessary curriculum for graduation,” explains Don Henderson, Director of Educational & Library Technology for the Grossmont Union High School District. “For example, students will work on writing scripts and technical documents in English class, and in math class they’ll work on budgets.”

Formerly a teacher at Grossmont High, Henderson prefers Apple hardware in his high-tech classrooms. “As a teacher it is very simple to justify using Macs in the classroom. There is no simpler way to set up and manage a network,” he says. So easy, in fact, that he once had his students help him reassemble his classroom — taking apart 18 older Macs and setting up 18 G4s. “We configured them on the network and the students were back to work in less than two class periods, which is less than two hours,” he explains.

The students at Grossmont gain more than technical skills as they create desktop movies — using iMovie, Strata StudioPro, and Cinema 4D XL, to name only a few — and other projects, including an interactive CD-ROM yearbook. “The student skills strengthened in this program are interpersonal, such as teamwork and cooperation,” says Henderson. “Students learn to function on their own, but also how to be a part of a team;

skills needed to function in the workplace of tomorrow.”

In his new position, Henderson is responsible for many schools and Mac labs. As he weaves in and out of classrooms, his goal remains focused. “I hope I am teaching my students and teachers that learning can never stop.” Indeed. www.guhsd.net/grossmont/grossmont.html

Always Learning

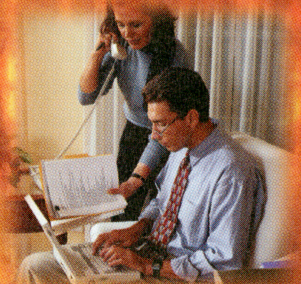
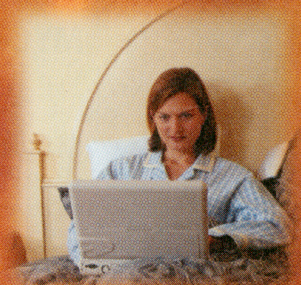
I was buoyed by the individual efforts of these educators: They help to ensure a promising future for today’s youth. Each of their projects, though unique, are fresh and commendable, and they all access Apple products — trusted technology for any phase of learning. **MHJ**

1 CONNECTION + AIRSTATION = FREEDOM

IMAGINE...

- Checking your stocks or e-mail in bed
- Paying bills or shopping online while your child downloads a homework assignment
- Connecting computers to share files, printers and Internet access without a tangle of wires
- Freedom to use your systems wherever it's convenient for YOU
- Greater security while connecting to the internet and high data transfer rate up to 11Mbps

AirStation provides a clean, wireless way to share the Internet so you can make the most of your cable or DSL connection. For all it does, AirStation is surprisingly affordable – only \$279 for the FREEDOM you deserve. Call 800.349.3384 or visit us online at www.techworks.com. AirStation for the wireless revolution!



AirStation™
Internet Sharing Device



www.techworks.com



"Power to Perform"

The Mac Means Business!

MYOB Announces Accessible, High-End Accounting Package

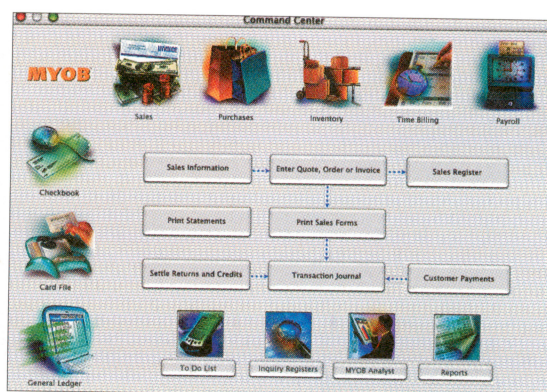
It's been about three years since Intuit thumbed its nose at Macintosh business users and dropped development for its business accounting products QuickBooks and QuickBooks Pro. As those years have come and gone, it's been clear that Mac users would be hard-pressed to find a business accounting application that was sufficiently powerful, made their accountants happy and was still relatively easy to use. While MYOB has always fulfilled the first two requirements, unless you were able to get yourself into an accounting state of mind, it could easily leave the average business user banging their right brain against the wall. Fortunately, it appears that there's an end to the accounting drought in sight.

By Jeff Battersby

MYOB, Ltd. and Apple Computer made a joint announcement at July's Macworld Expo in New York City. The announcement? AccountEdge: a brand-new Mac-based business accounting program built on the foundation of MYOB's already formidable MYOB product that, in the words of Clent Richardson, VP of Developer Relations for Apple, "We think is an amazing product and that we know will solve [our customers'] current accounting problems."

Apple and MYOB have worked very closely to develop a product designed specifically for the Mac small business user — companies with 25 or fewer employees. And, while MYOB reps were quick to state that the software was still in the Alpha development stages, we definitely saw a number of items that piqued our interest.

First, AccountEdge, which will only be available on the Mac, has been designed from the ground up to be a Mac-centric and OS X-savvy application. (MYOB states that, although AccountEdge is optimized to work under OS X, it will still be available to users running OS 8.6 or later.) Fortunately, although this application will not be made available to Windows users,



MYOB has made certain that data formats for both MYOB for Windows and AccountEdge will be perfectly compatible.

Second, MYOB is promising that current QuickBooks users will be able to import their existing data with a single click. Also, current QuickBooks users should expect very competitive upgrade pricing from MYOB.

Third, because AccountEdge is a completely new program, it includes some very significant improvements. MYOB reps stated that AccountEdge transactions will place a far greater emphasis on workflow and, like QuickBooks, a more intuitive "checkbook register" interface for entering your transaction information. This means that users will be able to more easily create quotes, turn those quotes into orders and packing slips and turn orders into invoices, all within an interface that's completely familiar territory — making this product completely accessible to all users.

With a promised ship date sometime near when this issue hits the newsstands, we can't wait to run AccountEdge through the paces.

For more info, please visit
www.myob.com/us
www.apple.com/smallbusiness

Is Your Mission Impossible?

*Does your
Mission Critical Application Require:*

- Capturing 7-Million Pixel Stills
- Taking Full Length Videos
- Recording Digital Audio
- Scanning Text Documents
- Remote Control Operation

*All in a Form Factor
that Fits in Your Pocket?*



CCD: 3.34 Million
Pixels

Lens: 3X All-glass
Optical Zoom

1CM Macro Close-up
Capability

Video: Full-length,
Full-motion

Storage: 8MB Onboard,
64MB SmartMedia Card
Support

Weight: Only 9.5 oz.

1-10 Cool Factor: 11

RICOH[®]
Image Communication

Introducing the RDC-7 Digital Camera.

MISSION ACCOMPLISHED.

1-888-RICOH10 | ricohzone.com

Bills, Bills, Bills!

Online Bill Payment Services

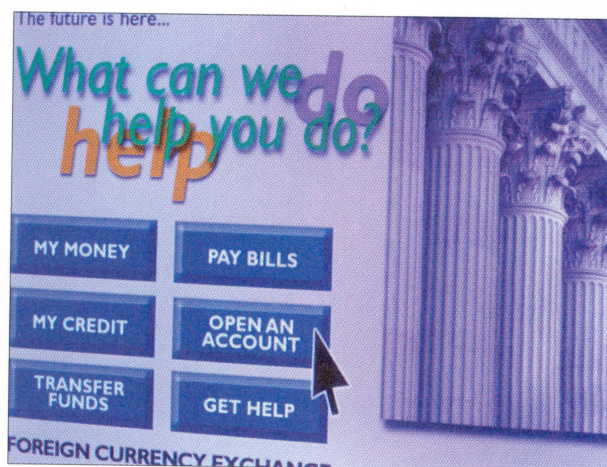
When you are the CEO, president, and PR specialist of your own business, the last thing you want to do is spend a few hours paying your bills at the end of each month.

Sitting down at your desk with your checkbook open, you face a stack of bills from your electric company, Internet Service Provider, gas company, and Visa and MasterCard for your personal and business accounts, and then there are those membership dues. It is enough to make you ask yourself if you should be a full-time accountant. If only there were a way to rid yourself of all this tedium so you can free up your hectic schedule and allow yourself more time to think creatively about your clients' projects. Believe it or not, the Internet might just hold the answer to your accounting dreams.

The Market

It is estimated that Americans receive more than 21 billion bills in the mail each year. That can mean 104 bills annually for some of us. These bills are mailed by approximately 3 million billers! Of all Americans who received bills in 1998, nearly 100% paid them through the mail. This means that they spent an average of \$46 on postage and close to \$150 on check writing fees. Such statistics fail to mention the time spent paying these bills or the late fees generated by even the most fastidious Americans when they don't manage to get a particular bill in the mail on time. In some instances, late fees can be as high as \$40 each month.

Aside from bills, there are other checks that you write periodically to individuals rather than to large companies. You may regularly write checks to the landlord, the maid, or to friends and family on a less frequent basis. All told, you are writing more checks than you might think. It is for this very reason that you might want to take a look at online bill paying services. They will allow you to stem the



tide of bills flooding your mailbox every month, free up your schedule, remove the clutter from your desk, and save you money.

Convenience

If your business requires you to travel extensively, be it across the state or around the world, using an online bill payment service can be tremendously convenient. You won't have to worry about facing all those bills — soon to be overdue — when you arrive home. You can keep abreast of any incoming bills while on the road from any computer in the world with an Internet connection.

We have chosen to highlight three online bill paying services that are strictly Web based to give you a better idea of the kind of service available to you and your small business. These services include Quicken's MyFinances, Yahoo!'s Bill Pay, and PayMyBills.com.

By Ross Tibbits

The Interface

The idea behind these services is that they offer ever greater flexibility and ease of use because they are Web based. You start by going to a particular Website and going through a simple registration process. Provide information such as your social security number, and checking account number(s), and go from there. You are probably thinking that the last thing you'd want to do is to put your social security number online, not to mention your checking account information. Well, read on and learn about the latest in developments in Web security to get a better understanding of the topic.

Security

With so much reporting in recent months on viruses, and computer hackers nearly running rampant around the world, there is legitimate reason to be concerned about security when you are contemplating placing limited control of your assets at the mercy of the Internet. The first step to ensuring that your data is protected on the Web is to make sure that you are using the latest version of either Netscape Communicator or Internet Explorer. Each of these browsers offers 128-bit encryption, which makes it remarkably difficult for anyone to intercept your data and translate it into readable text.

Former deputy director of the U.S. National Security Agency, William Crowell, described 128-bit encryption in this manner: "Brute-forcing a single 128-bit key encrypted message with 250 workstations would take an estimated 9 trillion times the age of the universe to decrypt a single message. If all the personal computers in the world — approximately 260 million computers — were put to work on a single encrypted message, it would still take an estimated 12 million times the age of the universe, on average, to break a single message." The fact is your personal financial data is safe with 128-bit encryption.

Yahoo!'s Bill Pay

To begin using Yahoo!'s service, you will need to sign on as a registered Yahoo! user at www.yahoo.com. This allows you

to choose a Security Key, which acts like a PIN (Personal Identification Number), such as the one for your ATM card. With your Security Key in hand you can begin setting up your Bill Pay account.

You will be required to provide a list of payees and the dates you would like the payees to receive the payment. To ensure that your payments arrive on time and safely, Yahoo! has teamed up with a company called CheckFree Corporation. CheckFree has been providing financial electronic commerce since 1981 and employs a Secure Socket Layer, or SSL, which is a security standard widely used by Internet browsers and merchants.

With CheckFree's help, Yahoo! has developed agreements with 37 companies throughout the country known as E-Billers. The E-Billers (utilities and other well known companies) will bill you online, reducing the paper mail in your mailbox. There is no charge for this service, and E-Billers will begin sending bills to you online in about 30 days. You can also send checks to any non-E-Biller or individual and they will receive a printed check in the mail.

Despite the formidable protection of 128-bit encryption, the SecurityKey, SSL, and CheckFree's respected history, you may like to know that CheckFree offers a guarantee that protects against unauthorized reading of data. If you suspect that your account has been tampered with you must notify CheckFree within two days, and your liability is limited to \$50. That means that if there is an unauthorized account transaction in your account of \$400, you must pay \$50. Furthermore, if CheckFree fails to pay your bill on time, it will assume responsibility for up to \$50 in late fees per transaction.

Yahoo! is offering you the first three months of service for free. If, at the end of this period, you want to continue using

Payee Name	Amount	Pay Date	Status	Action
High Power Company	\$25.01	26-Mar-2000	Scheduled (every 2 mo.)	Change - Cancel
Cell Phone	\$61.48	1-Apr-2000	Scheduled (every 1 mo.)	View Bill - Change - Cancel
Rent	\$1200.00	27-Mar-2000	Remind (every 1 mo.)	Pay - Change - Cancel
Jase Doe	\$137.87	1-Apr-2000	Scheduled	Change - Cancel
XYZ Credit Card	\$432.79	1-Apr-2000	Remind once	Pay - Change - Cancel
Drips Water Company	\$23.45	1-May-2000	Remind	Pay - Change - Cancel

Bill Pay's service, you have two options. You can either pay \$2 a month and 40 cents per payment for as many payments as you like, or you can pay \$7 per month for up to 25 payments. Additional payments then cost 40 cents apiece.

Quicken.Com

You are probably familiar with the accounting software that Quicken has been selling for years now, but you may not know that it has a one-stop shop on

Electronic Banks

It is estimated that over 85% of all banking transactions **are now done electronically**. Since 1994, telephone banking has grown by 50%, PC and Internet banking by 10% and debit cards by 91% annually.

the Web called Quicken.com. You can go directly from there to the Banking page, which you can then take to Online Banking. Among the options you will find here are View and Pay Bills. This link takes you to a setup page where you register for the service.

Because security is such a concern, Quicken requires that you download from its site the latest version of your browser with 128-bit encryption when you sign up for the service. You will also get a password and screen name so no one else can access your account. With this security comes privacy. Quicken does not use your personal information for any other purpose than to get your bills paid.

There is one payment plan available for \$5.95 a month. This includes payment of up to 20 bills. Additional bills will cost

you 30 cents apiece to process. Processing your bills can be quite easy. Quicken has set up arrangements with more than 100 companies nationwide to allow for electronic bill payment. This means that once you provide Quicken with the correct billing information, you will then get an electronic bill at Quicken.com's Website, as opposed to a paper one in your mailbox. If the companies whose bills you are paying are not a part of this network, bills will continue to come to your mailbox. You then simply go to the Website and enter the billing information so that Quicken will know who to send the check to. It will send paper checks to those companies not associated with the electronic billing network.

For an additional fee of \$3.95 you can have all your paper bills sent to Quicken, who will then scan them so you can view and pay them online. There is no limit to the number of bills you can have scanned.

You are also able to select from up to 10 different bank accounts from which to pay your bills. If there is a separate account that you use to pay your mortgage, simply specify that account. Your money will then be withdrawn on the day you specify and paid to the biller that same day.

PayMyBills.Com

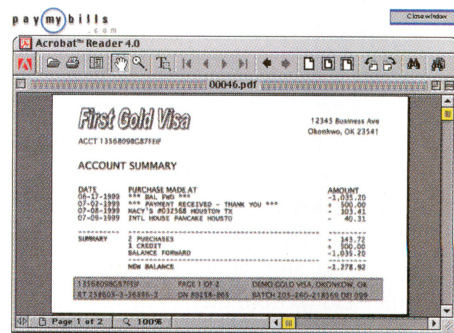
PayMyBills.com has teamed up with a handful of different companies to provide you with safeguards to ensure that everything you do online is secure and professionally done.

They have joined forces with Travelers Property Casualty Co., to offer insurance to online customers. Travelers has developed an online service provider called SafeWeb, which insures each customer for up to \$100,000 per loss.

The way that PayMyBills promises to pay 100% of your bills online is through its partnership with Image Acceptance Corporation. IAC provides inexpensive, high-speed scanning services to PayMyBills.com. Simply forward your bills to PayMyBills.com and it has them scanned. Once scanned, it sends you a notification that the bill has arrived and you can view the bill online before authorizing its payment.

If you have the need to see your bills again, there is no need to worry, they will remain online for one year. After that, they will be archived for seven years.

As with Yahoo!, PayMyBills.com offers you the first three months of service for free. Monthly fees will cost you \$8.95/month for 25 payments. That may



sound high, but remember, you get your bills scanned for free. For each additional payment you will be charged 50 cents.

Set Yourself Free

For all intents and purposes, online bill payment services provide you with some attractive bill management options. You will be freed from your desk for hours a month because all you will need to do is go to a Website and see if any bills have arrived. With a few selective keystrokes you have paid your bills and can spend time on more important things. These companies have worked hard to ensure that your information is safe and that no one will have access to it without your expressed approval. Just imagine not being greeted by a stack of bills each day as you arrive home. **MHJ**

Online Bill Payment Services

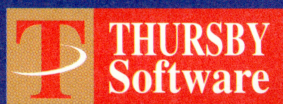
Service Provider	Fee	Security	E-Billers	Insurance
Quicken.Com www.quicken.com	\$5.95/month for 25 payments, 30 cents each for additional payments, \$3.95 scanning fee	128-bit encryption, SSL	100+	Customer limited to \$50 liability
PayMyBills.Com www.paymybills.com	Three months free, \$8.95/month for 25 payments and 50 cents for additional payments, Free scanning	128-bit encryption, SSL	100% of bills paid electronically	Protected up to \$100,000 per loss
Yahoo! Bill Pay www.yahoo.com	Three months free, \$2/month plus 40 cents for each payment, or \$7/month for 25 payments and 40 cents for each additional payment	40- or 128-bit encryption, SSL	37	Customer limited to \$50 liability



MacSOHOTM It rocks!

If your small office has a Mac and PC that need to share files, then you need MacSOHO, from Thursby Software. MacSOHO is the easiest, most cost effective way for your Macs and PCs to become best friends. It's fast, really fast, and secure and it's so simple to use and easy to install on your Macintosh, you'll think it rocks! MacSOHO, the perfect solution for your home or small office.

Download a free evaluation today.



The File Share FolksTM

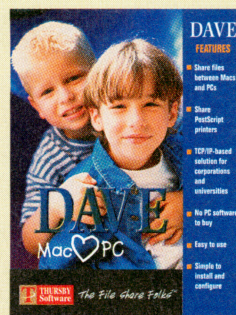
www.thursby.com

© 2000 Thursby Software Systems, Inc.

THURSBY SOFTWARE has the
perfect file share solution to
meet your needs.



The ideal solution for the small
office where Macs & PCs need
to share files.



The fast, easy way to share
files and printers between
PCs and Macintosh systems.



Achieve true NFS connectivity
between your Mac and
UNIX systems.



Windows users can access
files on any Mac workstation
or AppleShare server.

Digitally Divine

Two DV Camcorders Compared

If you have been paying any attention to Apple Computer over the last year or so, you must to know about their tremendous push into video production. The iMac DV (Digital Video) and iMovie software makes editing digital video as easy as operating your iMac.

Of course you can use iMovie on any Mac with FireWire ports. But before you can enjoy all the fruits of this incredible technology, you will need to find yourself a DV camcorder. Two new entries into this hot market are aimed at consumers who are looking for DV cameras without the DV price. Typically, DV camcorders are sold for between \$1,000 and \$2,500. Both the Canon ZR10 and the Sharp VL-SD20U are priced under \$1,000, making them the new entry level players in this field. So, the question is, how do they perform? Let's take a look!

Here's Looking at You

Many camcorders now have two parts to them, the actual camera and lens device and a separate but connected unit that houses the screen or LCD. The general benefit of this design is that it allows you to move the lens separately from the

LCD. Think of lifting one of these units over your head to capture a scene on a stage, while tilting the screen down at you to see what you are filming. It's a great feature.

The Canon's overall design is different conceptually than the Sharp's. Canon has incorporated a 2 1/2 inch screen into the side of its DV camcorder. At the push of a small button, the screen's edge pops out from the side of the ZR10's side, which lets you pull it open as if it were a small door. You'll find a neat little screen on the inside of this door surrounded in a cool translucent blue. The screen rotates so that you have a direct view of it whether it is in front, above, or below you. You can turn it around 180 degrees so that it is facing in the same direction as the lens, allowing you to film yourself more easily. When the LCD is in this inverted position, push it back into the body of the camera and you can use it as a mini

VCR. You see, the playback controls are right there above the screen. The ZR10's tape is located behind the screen on the other side of the camera.

The ZR10 also comes with a traditional viewfinder. If you turn on the camcorder with the LCD panel closed, the viewfinder will activate, giving you the same image that you see on the LCD. The viewfinder can be adjusted for angle and you will also find a focus adjustment.

The LCD arrangement is where the Canon and the Sharp DV's differ. You will find that the Sharp has incorporated the lens within a small vertical hand-hold that also contains the battery and houses the primary controls for Zoom, VCR, and Camera operation. The other unit of the camera houses the LCD and tape drive unit. The LCD is three inches in diameter, which makes it very comfortable to look at. Unfortunately, this arrangement makes the camera a bit bulkier which means you may end up using both hands to film. This added volume does not increase its weight over that of the ZR10, they both weigh just a hair over one pound.



Zooooom

When you purchase a DV camcorder, you'll want a zoom lens that allows you ample flexibility so that you can capture people, natural landscapes, and events both near and far. Each of these camcorders comes with a potent zoom lens, and each offers optical and digital zoom.

The Sharp has a built-in 100X zoom, whereas the Canon has a more powerful 200X zoom lens. Mind you, although the Canon's zoom is twice as powerful, it can be difficult to actually get a good piece of footage using zoom at that strength. As you zoom in on an object with each of these camcorders, they do an excellent job of focusing and creating a clear, crisp, and bright image — to an extent. Their optical zooms are very good and you'll be pleased with their detail.

Digital zoom is activated after 10X on each camera. But you should know that when you reach the highest zoom settings, it becomes increasingly difficult to maintain a steady image. Imagine yourself zooming in on a building a quarter mile away, the slightest movement you make will be amplified, creating huge movements on the screen. Image stabilization software is built into each camera, but it is meant to operate at much lower zoom settings. Thus, you'll want to consider using a tripod at these higher zoom settings. Furthermore, the closer you get to an object, the bigger the pixels get. Images will get increasingly grainy and eventually, all you will see is an unidentifiable mass of grainy color. The Sharp was particularly helpful in fixing this automatically with its automatic pull-back feature that will pull back the zoom until the image is in focus.

When you want to get really close to an object, I mean really close, both the Canon and the Sharp offer a Macro setting that enables you to focus on printed words less than an inch away from the camera.

Gentlemen, Charge Your Batteries

No matter what you are filming, near or far, you are going to want to have the flex-

ibility to be creating your masterpiece without having to constantly change-out the battery pack. These camcorders are so small it is amazing that they even have batteries in them, not to mention the fact that each can last well over an hour per charge. The Canon has a small battery pack that slides onto the back of the camera. Fully charged, this pack can record for up to two and one half hours using the optical viewfinder. If you use the LCD you'll have two hours.

Because the Sharp does not have a viewfinder and the battery must power the larger three inch LCD, usage is limited to one hour and forty-five minutes. Of course, each camera has optional batteries with greater capacity.

MacMovies

So, what do you do after you have spent a day playing at the beach, using your camcorder to capture all those precious family moments? Each of these camcorders is equipped with FireWire — the very fast cable interface that lets you download your video to your Mac. All you have to do is connect one end of the FireWire cable to the camcorder and the other end to your Mac, and then open iMovie on your Mac. iMovie will immediately recognize that there is a DV camcorder attached and you can download the whole thing by simply clicking on Download through the program's main window.

DV Features

Although Apple has made it incredibly easy to create movies with sound, fades, and even slow motion, the DV camcorders have their own share of tricks up their proverbial sleeves.

If you are interested in high quality audio, both cameras are set to a default 12 bit audio, but you have a 16-bit audio option for improved sound. You can also attach a separate microphone to the cameras so that you don't catch all the little



noises that you make while operating the cameras — this will be very apparent on your first film.

Each of these cameras allows you to scroll through an easy to use menu on their LCD screens. It's nothing like programming your VCR, you are really just turning features such as the remote control on and off. Yes, each camera has its own remote! The Sharp has a tiny little remote that is about the size of a credit card, whereas the Canon's is large, not unlike one you'd find with a television.

The Final Decision These are two great DV camcorders. Each can be used as both

a camcorder and a mini VCR with remote. The Sharp's larger LCD is easy on the eyes, but its bulky design and lack of a viewfinder are drawbacks. The Canon's 200X zoom is limited by pixilation, and even though it features a nifty rotatable LCD, it's a little too small. These are two great camcorders, but in the end, the Canon has the edge for its one-handed, compact design, and its viewfinder. **MHJ**

rating ★★★★★

Canon ZR10
\$999, Canon Inc.
800-828-4040
www.canon.com
PowerPC Required

👍 Fold-out LCD, powerful zoom, very compact, has optical viewfinder.

👎 No auto zoom adjustment, small LCD

rating ★★★★★

SHARP VL-SD20U
\$999, Sharp Electronics Corporation
800-237-4277
www.sharp-inc.com
PowerPC Required

👍 Auto zoom adjustment feature, large LCD, small remote

👎 Bulky design, no optical viewfinder

SkyLINE 11MB Wireless PC Card

While the AirPort Base Station brought freedom and mobility to a multitude of PowerBook and iBook users, some of you not using one of the newer PowerBooks, may have been left out of the wireless networking option because of design limitations. Now Farallon has introduced an 11MB card that slides into your Type II PCMCIA slot and gives wireless LAN access to the PowerBook masses.

To my dismay, I discovered that my new PowerBook was not capable of accepting an AirPort card. Imagine, then, my absolute pleasure at discovering Farallon's new SkyLINE card — an AirPort-like PCMCIA card that can be used in almost any Mac PowerBook or PC.

Installing the SkyLINE was simple. Just run the installer from the CD, restart your Mac, and slide the SkyLINE

into your PCMCIA slot. You'll immediately see the Farallon Wireless icon appear on your desktop and the light on the SkyLINE's antenna will shine a solid green — which means you've made contact with a base station. Once you change your TCP/IP and AppleTalk settings, you'll be able to connect to your wireless network at speeds up to 11MB.

The SkyLINE's only real downside is its complete lack of AirPort Base Station management utilities. While you can use Apple's AirPort Admin Utility to configure the Base Station, unlike Apple's AirPort card, the SkyLINE doesn't provide any utilities that allow you to view the current status of the Base Station. This means that, in order to determine whether the Base Station modem is currently connected, you'll have to pick up the telephone or watch your Base Sta-



tion's blinking lights. Also, if you need to make the modem hang up, there's no way — short of a third-party utility — to do it.

The Final Decision

Farallon's SkyLINE card is easy to use and provides excellent high-speed access to wireless networking environments; especially to anyone lacking Apple's AirPort capabilities. Unfortunately, the SkyLINE's complete lack of AirPort Base Station management utilities makes it a good, but not completely perfect, solution.

— Jeff Battersby

rating ★★★★★

\$199, Farallon Communications, Inc.
510-346-8000
www.farallon.com

👍 Gives wireless LAN access to AirPort-deficient PowerBooks, amazingly easy setup

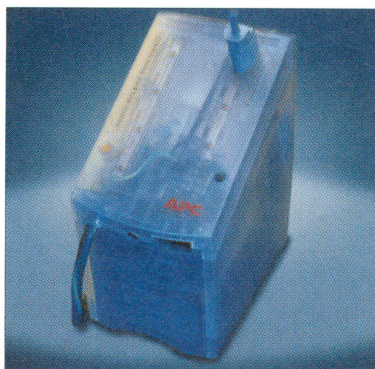
👎 No Base Station management utilities

Back-UPS Pro 500

With winter just around the corner you should be thinking about protecting your computer system with an Uninterruptable Power Supply (UPS) like the Back-UPS Pro 500.

This UPS is a battery coupled with well-designed software and hardware. You plug the UPS into a common wall socket, and then plug your computer, monitor, and peripherals into the UPS. Six outlets on this 500VA provide surge protection, and three of them also provide battery backup.

APC worked closely with Apple to integrate the Power Management software with Apple's Power Class drivers that were supplied in OS 9.0.4. This



software now has the power to save open files, close programs that are open, and smoothly shut down your computer.

If power does fail — or I pull the plug — the 500VA emits four loud chirps to alert you that it is now in control. The 500VA will chirp periodically to let you know that the battery is discharging. When the battery reaches 50% capacity, the chirps are constant rather than periodic. Eventually the chirps will change to a constant

tone, imploring you to turn off your computer as soon as possible.

If you open APC's Shutdown Manager program you will see a Status window with Available Runtime in minutes and the Battery Level — at 100%

charged, my battery gave me 16 minutes of runtime before I had to shut-down. Just relax and watch as the exact status of your battery is detailed before you. Even better, there is a Configuration set-up through which you can specify if you want the 500VA to save all documents before shutdown and if you want the unit to restart your computer after the power is returned.

The Final Decision UPS equipment is an important part of any small office, or home computer system, for that matter. APC has done its homework to make its Power Management software work seamlessly with your Mac to ensure documents, software, and hardware are protected in a blackout.

— Ross Tibbits

rating ★★★★★

\$179, American Power Conversion Corporation
800-800-4272
www.apcc.com

👍 Seamless power management integration

👎 Software only works with OS 9.0.4

Imagine a printer that's as fast as you think.



The new Mac compatible Z52

Now you can put your ideas on paper almost before they pass your lips. Introducing the electrifying new Lexmark Z52, part of our first ever line of Mac compatible color inkjets. Any Mac user who's worked with our lasers will recognize the Lexmark quality. And the Z52's pedigree shows through, printing superbly at up to 2400 dpi resolution. It can also print text at speeds of up to 15 pages per minute.

What's more, Mac enthusiasts can finally reap quality graphics at a breakthrough price. So stop thinking about it and call 1-800-LEXMARK or visit www.lexmark.com or <http://guide.apple.com/lexmark>.

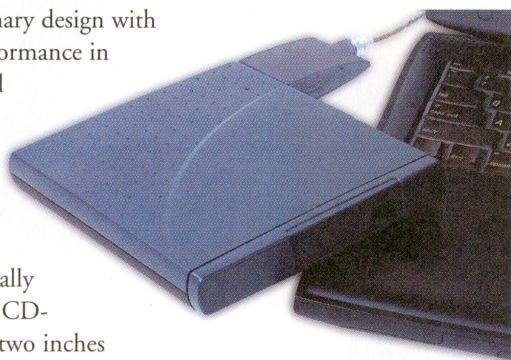
LEXMARK
Passion for printing ideas.™

Available at Best Buy, Circuit City, Comp USA, Office Depot, Office Max and Staples. Product may not be available at all locations. Lexmark and Lexmark with the diamond design are trademarks of Lexmark International, Inc., registered in the United States and/or other countries. Passion for printing ideas is a trademark of Lexmark International, Inc.

VST CD-RW Drive

Take a look at external CD-RW drives. What do you see? You see large, ugly, rectangular boxes. VST has combined extraordinary design with exceptional performance in its latest external CD-RW.

What makes the VST CD-RW so remarkable is its size. It is literally no wider than a CD-ROM and only two inches longer. These dimensions are complimented by its 3/4-inch depth. Tucked neatly behind the well-designed CD tray is a lithium battery. This lets you use the drive while traveling with your PowerBook or iBook. Simply plug in the USB cable — or the available FireWire cable — and you are ready to go.



The drive is a capable workhorse for burning MP3 tunes or backing-up files. It writes at 4X, re-writes at 4X, and reads at 8X. If you use the available FireWire adapter, the read speed increases to an

impressive 20X.

As with most CD-RWs, this one comes bundled with Adaptec's easy-to-use and well-known Toast 4.02. This program allows you to mount your CDs on your desktop and

makes recording and re-writing CDs a breeze. All you have to do is drag and drop files into the main application window and click on a couple of buttons and you are making CD's. Unfortunately, the drive does not come with any blank CD-Rs or CD-RWs.

A slim serial plug snaps into the side of the drive and is connected at the other end to your computer via USB. The serial connection was delicate and had a tendency to wriggle itself loose if there was any pressure pulling on the cable.

If you need to use the AC adapter, just plug it in next to the USB adapter port and get to work.

The Final Decision

The VST CD-RW is compact, great looking, portable, and provides great flexibility at reasonable price.

— Ross Tibbits

rating

\$399, VST Technologies, Inc. 978-263-9700 www.vsttech.com PowerPC required

Exceptionally portable, useful activity lights, battery power, FireWire option

Delicate computer interface connection, no media included

NetBarrier 1.5.2

It's a jungle out there. Unsavory characters want to take control of your computer to hack Websites and steal your passwords and personal credit card information. The more time you spend online, the more vulnerable your Mac becomes to invasions from the Internet. But there is help via NetBarrier, by Intego.

NetBarrier protects your Mac in three ways. First, it sets up a firewall on your Mac. This is a zone of protection that keeps net vandals out in a fashion roughly similar to the way a virus application prevents infection of your Mac's files.

Another protection scheme, Anti-

vandal, prevents specific targeted attacks from outsiders. The third tool, Filter, is designed to keep outsiders from stealing passwords and other private information.

With the help of a Net guru who knows the ins and outs of online protection, we put NetBarrier to the test. We made an effort to attack my Power Mac G4 in various ways, but the program put up a solid wall of protection.

Installing NetBarrier is simple, just double click on the installer, jump through a few prompts, and in a few moments you restart your Mac and the protection is activated. But when it comes to customizing the program to do your bidding, you reach for the manual and find there isn't any (and there's no help menu either)! All that's

in the two-inch box is a CD case and cardboard inserts. The real manual is on the CD, in Adobe Acrobat format, for viewing or printing.

The electronic manual is well written, but somewhat short on explanations. You learn how to set up a feature, but there's not a whole lot of information about why it's needed and the best way to benefit from it.

The Final Decision

Threats to computer privacy are everywhere and you never know when your Mac might be attacked by an unscrupulous character. If you spend lots of time online, NetBarrier is a program that you should seriously consider.

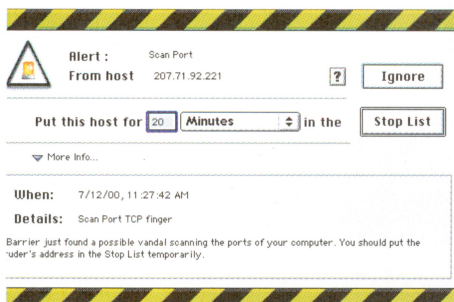
— Gene Steinberg

rating

\$75 (limited offer) normally \$150, Intego, Inc. 877-946-8346 www.intego.com

Fast installation, comprehensive protection from Net intruders, transparent operation

Lacks printed manual, some features difficult to configure



"WOW Thing you make my Mac sing."

— CNN.com

"...a must for anyone who spends time listening to music on a Mac, especially those who enjoy grooving to MP3."

— MacWorld
March 2000

"...the first must have product for anyone who listens to music on their Mac."

— MacNN

"When sound is piped through the WOW Thing it gets "automagically" filtered, creating a rich sound..."

— MP3.com, Nov. 1999



"WOW Thing makes a huge difference... games became more immediate and dramatic with the sound boost."



— MacHome
Dec. 1999

"Give your Mac a rich new sound."

— USA Today

"Here's the good news: it really does do it."

— MacGamer

**Order
online today
and make your
wallet sing, too!**

**Only \$29.95!
Save \$10.00!**

Reach us online at
www.wowthing.com/machome



Includes

- ▶ WOW Thing™ box
- ▶ Mini to mini connector cable
- ▶ 110 AC/DC power adapter
(RCA cable for video game console sold separately)
- ▶ 30 day money back guarantee and 1 year warranty

What does it do?

- ▶ Reduce the "tinny" sound of computer speakers
- ▶ Improves sound quality of MP3 and streaming media files
- ▶ Enhances bass performance and sound image size
- ▶ Restores dynamics of compressed audio over speakers or headphones

Suggested Uses and Compatibility

- ▶ Connect between Mac, video game console, PC or MP3 player and external speakers or headphones for improved sound performance
- ▶ Compatible with any operating system or game console
- ▶ Requires connection to speaker or headphone out jack and AC power outlet

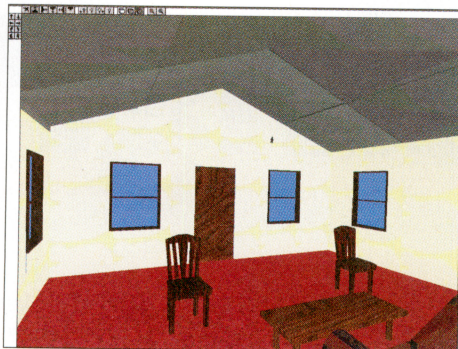
SRS (S)

2909 Daimler Street
Santa Ana, CA 92705
www.srslabs.com

800.525.9444

3D WalkAround

If you mention the words *home improvement* to me, I am likely to start waxing poetic and singing the praises of power tools and “home systems.” Such a reaction is not uncommon. One tool that won’t cost you a lot of dough, and which will certainly clarify your particular vision, is 3D WalkAround.



This is a 3D-rendering program that allows you to renovate or design your own home before ever touching a saw.

Installing this useful program is as uncomplicated as slipping the CD-ROM into your CD drive. Once installed, 3D WalkAround provides you with a main window that is surrounded

on two sides by an array of tools and textures. Before you start playing around with these, it is best to take the helpful tutorial. Draw four walls, install a floor, select locations for windows, and then decorate the house with

almost any kind of furniture you like. This exercise teaches you how to precisely draw a virtual house in a two-dimensional format and then view it using the 3D tool.

When viewing your creation in 3D you can walk into and

around your house, or fly above it for an aerial view.

Choosing furniture — or appliances for that matter — for your virtual house is a lot of fun. By opening the Seating Library, for instance, you can select from any number of different seats and couches. Better yet, you can

then click on the 3D button and you’ll get a rotating 3D image of the piece. You can then zoom in, zoom out, or control the image with your mouse. Although this is a great idea, the ability of 3D WalkAround to recreate these objects very realistically is limited. Images are not well defined by texture or depth as much as they are by their shapes and colors. Despite this, you get a useful image to place in your model.

The Final Decision 3D WalkAround is one tool you home improvement types might look into.

Although the pictures and images look a bit low-tech, your imagination and creativity can draw the home of your dreams.

— Ross Tibbits

rating

\$69, Abracadata, Inc.
800-451-4871
www.abracadata.com
PowerPC Required

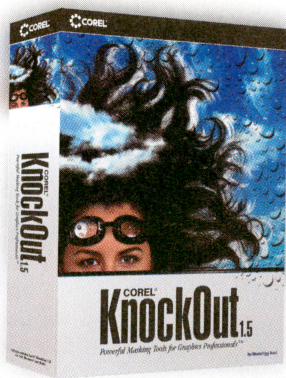
 Very useful design and 3D tool, helpful tutorial, lots of libraries

 3D rendering lacks refinement

Corel KnockOut 1.5

Ah, the fine art of masking. One of the most tedious aspects of image editing is cleanly selecting objects in a canvas for use in independent graphics and composites. There’s the beach shot where hair is blowing around, or the water glass with droplets and condensation. What’s needed is a program that will remove all extraneous detail surrounding the main object, thus separating an image (foreground) from its background.

KnockOut 1.5 helps designers create masks, preserve the edge detail of objects, and capture such hard-to-grasp elements as hair wisps, translucent and transparent images, blurred or out-of-focus edges, and



shadows. Processing an image in KnockOut — which is easy and straightforward — generates an alpha channel in which the mask is stored.

There’s a knack to working with KnockOut. This program

takes time to master. Meticulous selections proved tricky and time consuming. Moreover, the program’s performance depends on the quality of the original image. Indeed, even high-resolution JPEGs from a digital camera may retain unacceptable artifacts even after

masking with KnockOut.

The Syringe, Edge Feather, and Shadow Feather Tools, designed to fine-tune sensitive edges, did not always cleanly mask very complex images. There are multiple undos, how-

ever, and you can always re-process your image. Hint: Always use the best-quality image, such as an uncompressed TIFF or a scanned photo at least 600 dpi for better results.

Unfortunately, KnockOut 1.5 requires 65MB of RAM plus enough hard drive space to provide virtual memory for between five and eight times the size of the image in order to function.

The Final Decision KnockOut 1.5 is powerful, but takes a lot of skill and patience to use. It also requires a lot of memory and tends to work less efficiently with anything but the highest resolution pictures.

— Jackie Dove

rating

\$280, Corel
800-772-6735
www.corel.com

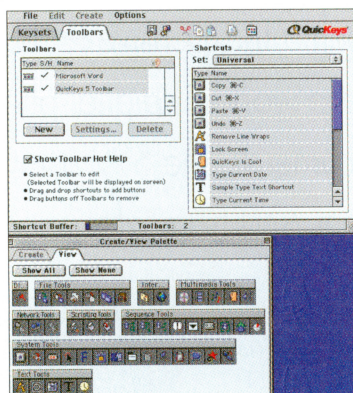
 Sophisticated masking tool

 Selecting objects is tricky and time consuming, heavy RAM requirements

QuicKeys 5

Macro utilities — programs that can shorten multi-step processes into one or two clicks — easily reduce the time required to complete repetitive tasks. QuicKeys, the oldest Mac macro utility, adds dozens of new and useful features to version 5, making an already excellent program great.

Take one look at the newer version and you'll immediately see the difference. First, CE Software has completely redesigned the way QuicKeys toolbars look and work. Toolbars can now contain tabs, so you can organize all your shortcuts into one easily accessible palette. Also, you can now create "Pop Out" tool-



bars that can be hidden on the edge of your screen and that only reappear when you move your mouse over them. Another great QuicKeys feature is its ability to respond to voice commands. This feature alone extends Apple's speech recognition capabilities.

Among QuicKeys' many other new features — and there are literally dozens — is Screen Lock, which allows you to password protect your Macintosh screen; more versatile timers, greatly enhancing your ability to create automatic macros and scheduled events; and a text tool that now allows you to type up to two thousand characters instead the earlier version's meager two hundred fifty five.

To make the program easy for new users, QuicKeys provides a number of useful, pre-defined macros, including

tools to automatically type the date and time, close windows and programs, and switch between open applications. Also, any of the built-in macros can be combined to create a sequence of events. For example, you could have QuicKeys copy text from one application, switch to another, paste the text and then print it, all with the click of a button.

The Final Decision QuicKeys is a powerful macro program that provides even the greatest of novices with the ability to automate dozens of repetitive tasks. New interface features make the program more versatile and helps to make QuicKeys nearly the best macro program on the market.

— Jeff Battersby

rating ★★★★★

\$100, Online \$90, CE Software
800-523-7638
www.cesoft.com
PowerPC Required

Easy to use macro creation utility, shortens multi-step tasks to a single click

Could be more versatile

Canon Photo Advanced Edition

So, you've got a digital camera and you've got a host of digital images on your hard disk. Now what? Canon would like to help you take the next step with the Canon Photo Advanced Edition software suite.

The main application is CanonPhoto, which lets you remove red-eye, adjust the contrast and brightness, tweak the color, and add text with a realistic shadow. Better yet, as with more expensive programs, CanonPhoto allows you to work in layers, so that if you make a mistake or need to



make a change in one layer, you can leave the other layers unscathed.

It's also got tools for embossing, turning your photo into a drawing or a painting, or applying a variety of exotic textures. You can then incorporate your designs into templates for greeting cards and calendars, or put them in a fanciful frame.

The other applications included in this package are Photo Fantasies, with which you can place your mug in the body of a movie star; Photo Montage, for recreating a photo using small photos; Panorama Maker, which stitches pictures together; and Video Slidehows, which allows you to create multimedia presentations.

There are a few "unfinished touches," however. When you move some of the

slider controls in CanonPhoto, for example, it produces some unwanted visual artifacts, and the program will merge your text and graphics layers without asking you first. Also, using the requisite 64MB of RAM, CanonPhoto wouldn't let me jump to Photo Fantasies due to memory problems.

The Final Decision If you're looking for an inexpensive way to quickly and creatively process your digital images, then you can't go wrong with the Canon Photo Advanced Edition. Just make sure you have a lot of RAM and disk space.

— David Weiss

rating ★★★★

\$40, Canon Software Publishing
800-385-2155
www.software.canon.com
PowerPC Required

A huge suite of incredibly fun programs, very inexpensive, each program is easy to use

Some minor interface glitches, large memory and disk space requirements

Cameras on a Shoestring

The JamCam Vs. the DualCam

Digital cameras are not known for being inexpensive — until now. For less than \$150, you too can take the plunge into the world of digital photography. MacHome took a look at two inexpensive digital cameras, the \$99 JamCam 3.0 from KB Gear Interactive, and the \$129 Digital DualCam 640 from ixla.

Meet the Cameras

The DualCam is a small and robust camera with a flash; it's about the same size and shape as a bar of soap, and it's stylishly decked out in chrome-colored plastic. You can adjust the exposure, a fairly sophisticated feature for a camera in this price range. It even has a video-out port, so you can display your photos on your TV. It can store 16 photos of 640 x 480 resolution. Why do they call it the DualCam? It can also work as a video camera if you've got the right software, and you've got it connected to your Mac.

By David Weiss

The JamCam is a bit larger, and it's festooned with large black grips, giving it a "sportier" look. It also has a flash, but has no facility for sending video out to a TV. It can store only half as many pictures as the DualCam, but it does allow you to add tiny "MultiMediaCards" for an added 16MB of storage. The JamCam's LCD shows an animated pattern that indicates that something is happening. The JamCam can take a picture and be ready for the next one in almost half the time as the DualCam — about 8 seconds.



DualCam

Image Power

Both cameras produced serviceable images, though the DualCam images lacked color contrast, and the JamCam images had highly saturated, almost fluorescent colors. The DualCam, however, provided better detail and uniformity overall, so it was easier to compensate for the lack of contrast (with a little help from Adobe Photoshop).

Digital Goodies

The DualCam comes with Corel software for image editing and working with your photos and Canto Cumulous for organizing your images. The DualCam's photo-transfer driver is a bit clunky, however. If you try to download all of your images from the camera at once, it won't work. It does work, however, if

instead of clicking Download you click Save, something I learned after phoning the company. Ixla representatives told me that this problem should be addressed by the time you read this.

The JamCam provides a slick, easy-to-use driver for transferring pictures, but that's it — as far as working with your photos, you're on your own.



JamCam

The Final Decision

In the end the DualCam came out ahead by a narrow margin. The JamCam has a lot going for it. It's got a slot for adding memory, it takes very little time between shots, and it provides clear feedback so you know where you stand. It's also less expensive. Also, the DualCam, at present, has a slightly clunky driver for downloading pictures. However, the DualCam provides exposure control, twice the storage capacity, video display capabilities, a more hearty software offering, and overall, it provides slightly better pictures. **MHJ**

rating ★★★★★

JamCam 3.0
\$99, KB Gear Interactive
800-926-3066
www.kbgear.com
USB Required

👍 Less expensive, has slot for memory cards, quick recovery between shots

👎 No video-out, limited software package, images are oversaturated

rating ★★★★★

Digital DualCam 640
\$129 after \$20 rebate, ixla
800-881-2966
www.ixla.com
USB Required

👍 Small, has video-out port, stores 16 pictures, has good software package, provides sharp detail

👎 Driver is a bit clunky, takes a long time between shots, provides minimal feedback

Draw, Pardner!

Illustrator 9 Comes out Shooting

Just a few short months after the release of Macromedia's Freehand 9, Adobe steps up to bat with its ninth version of Illustrator. The graphics applications have traditionally played a game of leapfrog in feature sets, and this match is no different.

Dueling Media

Taking a cue from Macromedia, Adobe retailored Illustrator 9 with an eye for the Web. Furthering the focus on Web-ready bitmap graphics, Illustrator 9 includes an option to create artwork in a pixel preview mode. Artists can specify pixels as a global measurement unit, but unlike Freehand, the pixel preview mode actually displays pixels at a constant size. Zoom in, and you'll see larger pixels instead of better defined objects and lines. This is very important for Web designers. Adobe takes the Web focus even further by allowing artists to snap all objects to pixels. This means that a single line drawn horizontally or vertically will adhere to the pixel grid, minimizing anti-aliasing. In short, the line will be clear and well defined, rather than blurred. Graphics can then be exported in several bitmap standards, including GIF and JPEG.

Illustrator 9 also includes some animation tools — objects can be arranged in different layers and exported sequentially. The program also supports "tweening." For example, you can select two dissimilar objects, apply a blend to create a cascade of interim objects, release the objects to layers, and export it as an animation. You can easily create a simple morph.

Illustrator 9 provides a special focus for a new technology known as Scalable Vector Graphics (SVG). SVG is an open standard for Web-based animation that offers all the features of Macromedia's Flash while adding support for TrueType and Type 1 fonts, extensible mark-up language, and cascading stylesheets. Flash is so pervasive, however, that it's difficult to foresee it ever supplanted by SVG.

Welcome Changes

At long last, Adobe has incorporated transparency effects into Illustrator. Artists can now adjust the opacity of any object or layer, including type and bitmap images. A variety of gradients can be applied to transparent objects, too, allowing objects to fade from one side to the other. Illustrator 9 also supports Photoshop layer options, such as Darken, Lighten, Hue, Saturation, and Luminosity, which have different effects on the appearance of objects in lower layers.

One of the most welcome transparency features is live feathering. Feathering fades the edges of an object so that transitions appear smoother and softer. The degree of feather can be easily adjusted within the dialog box, allowing for ghost-like effects or simple glows.

Text remains editable and transparency is preserved when Illustrator 9 files are exported to Photoshop 5.5. Illustrator 9 also fully supports Adobe's Acrobat technology, allowing designers to export any illustration or document to the Acrobat PDF format. Finally, the application includes provisions to apply simple, non-destructive live effects to objects, such as drop shadows or radial blurs.

For all its might, Illustrator 9 has a few notable omissions. Adobe's latest edition in the popular series neglects advanced distortion tools and perspective grids, hallmarks of Freehand 9's feature set. Still, Freehand 9 lacks Illustrator's robust gradient designer and has now fallen behind with its transparency effects and pixel-based graphic generation tools, making it difficult to hand the pennant to a single product.

The Final Decision Adobe Illustrator 9 adds several sought-after features that make it a must-have for any die-hard fan of the application. It's a costly investment at \$399, however, so curious consumers may want to wait for Adobe to release a downloadable demo of the application. **MHJ**



rating ★★★★★

Illustrator 9
\$399, Adobe Systems, Inc.
800-272-3623
www.adobe.com

Pixel Preview mode eases creation of Web graphics, excellent transparency effects, Flash and SVG support

No advanced distortion tools or perspective grids

Meeting and Greeting

Send Your Regards Via the Web

It's getting toward that time of year. Holidays, parties, getting back in touch with the people you've lost track of. Increasingly, the Web is being used for everything from sending photo albums to making your own personal Websites and greeting cards. Send a boring old email? No way!

Greeting Cards

While you may be too swamped with work and family obligations to expend any creativity online, have no fear. Online greeting card companies give you a vast variety of cards or virtual postcards for free. While many are designed to look just like their traditional paper brethren, others add a pinch of animation and sound to spice up your message.

These cards feature professionally produced art and give you a variety of personalization options. Some sites let you pick the background color, type style, and type color of your message. You may even get to pick the stamp! All let you write your own personal message and address it to

Prairie Frontier (www.prairiefrontier.com/pfcards) specializes in beautiful flower cards and wildlife greetings. On Prairie Frontier's Website, you'll be greeted with thumb-

nails of each card. You also pick the music you want from a selection of at least 20 tunes to accompany your greeting.

If you're of the environmental persuasion, check out E-Cards (www.e-cards.com), where you'll find creations that also support nature and wildlife causes.

Send an iCard

Another way to keep in touch is to send an Apple iCard, accessible from the Apple Website (www.apple.com). The reason iCards was created was ostensibly because a certain Apple iCEO named Steve found all other online greeting cards to be severely lacking. If you share this view, iCards is your ticket to great greetings.

You can either use iCard alone for its many beautifully designed cards (and we agree that iCards has a very tasteful, if rather small, selection in each category), or you can design an iCard using your own digital image for a more personal touch. For this you will need an iTools account,



By Jackie Dove

whomever you want, or to a number of people at once.

Greeting card sites give you ample opportunity to preview your card as you build it. They generally show you thumbnail images of many cards first, and when you click on the thumbnail a larger version of the card appears, complete with animation and music, if that's included. To send the card, click Send and then fill in the information. When you "mail" your card, the recipient(s) is notified that there is an e-card waiting at a special URL.

Typically, an e-card will remain online for a month or longer before it is removed. Be sure to turn up the volume on your speakers, as many greeting cards are animated and accompanied by music.

One popular greeting card vendor is Blue Mountain Arts' Greeting Cards (www.bluemountain.com). Look for birthday and event cards, holiday greetings, messages of undying love (what other kind is there?), and much more. Cards are also available in languages other than English.

available if you are using Mac OS 9. For information on how to set up an iTools account, look under the iTools tab on the Apple Website.

After setting up your account, you can upload any of your digital images (as well as other documents up to 20MB) to the Apple server (iDisk) and use them to create iCards or a personal Website or photo album with the new, improved HomePage. Your iCard comes to its recipient via their email program.

Conversely, photo-sharing Websites such as Club Photo (www.clubphoto.com), PhotoLoft (www.photoloft.com), or Photo Island (www.photoisland.com) also have resources with which to send digital greeting cards. (You can read more about photo-sharing Websites in the August issue.)

Your Own Greeting Site

Say you don't want to use other people's art and layouts. Say you want to create something uniquely your own, which you can update and alter later on? Well, that calls for a Web page.

To make a greeting card page, all you have to do is create a simple text page, insert a photo and a message, and presto, you have an electronic greeting card sitting on its own URL. That site will not be removed until you take it down yourself.

Most Internet Service Providers (ISPs), give you a small amount of server space to post a personal Website. Check with your ISP as to how much space you are allotted with your account.

Next, you'll need some way of coding some simple HTML (Hypertext Markup Language) in a text document so it can be read by a browser. You can hand code your HTML with the code provided in this story (see Ye Olde Code on p. 46), or you can use some low-cost visual Web page authoring programs (under \$100) that are on the market, including Deneba's Canvas 7 SE (www.deneba.com). Also consider Corel Print House 2000 or Corel Print Office 2000 (www.corel.com). These programs let you visually arrange type and images on your screen and will write the HTML for you.

You can also use Apple iTools HomePage, which gives you many page-layout choices for your own Web page (or site) in minutes. Check out the templates provided by the Free Web Templates Website (www.free-webtemplates.com).

Place an Image

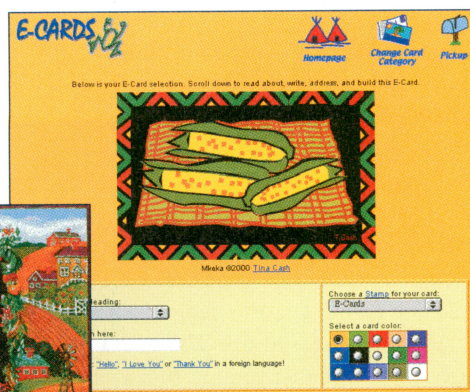
If you embark on a greeting Web page, you'll also need a way to handle your images, either by scanning them or downloading them from a digital camera. If you have a roll of film but no scanner, you can mail your undeveloped film to a photo-sharing Website, where you can have it processed and digitized.

Once you have an image you want to use, make sure it is either in JPEG (for photographs) or GIF (for drawings) format, the special file formats for the Web. You may want to use an image editor such as Adobe Photoshop 5.5, which gives you a way to crop, edit, and optimize your photos or create animations for the Web. Photo-sharing Websites and digital cameras will automatically deliver your images in JPEG format.

Since images take the most time to download, it is important that they are small (not more than 30K). Of course, you can place more than one image on your page, but beware of the download-speed tradeoff.

Be sure to name your Web page with the suffix .html or the browser won't be able to read it as a Web page. Preview your page by dragging its icon into your browser window. Make sure you have all images and text documents in one folder so that the browser can find them.

When you are satisfied with your greeting Web page, upload the text page and



Here are some examples of the professionally produced greeting cards found on the Web. Send a Thanksgiving or a Kwanzaa card, for instance.

any images you are using to your ISP's server.

Generating Code

So what does the code mean? HTML tags are commands enclosed within Less Than (<) and Greater Than (>) signs. Attributes to those tags make them more specific. HTML is not case sensitive.

You'll want to use a text editor such as SimpleText to create your Web page rather than Microsoft Word, which is a word processor.

However, Microsoft Word can be used if you want to construct your page and then save it as an HTML document. In

Free Web Art

Absolutely Free Clip Art www.allfree-clipart.com

Clip Art Gallery www.clip-art-gallery.com/netscape/index.html

Free Stuff Center www.freestuffcenter.com

Absolute Web Graphics Archive

www.webgraphicsarchive.com/webgraphics

fact, if you don't want anything to do with hand coding HTML, just type your greeting in Word, Save as an HTML, and the program will code it for you. It can even incorporate graphics and tables!

Cool Bullets, Backgrounds

Now is the time to think about decorat-

ing your page with little animations, icons, and holiday-based elements. Large numbers of professional artists design Web-based graphics, and tons of sites literally give away such graphics for free as long as they are for personal use on a non-commercial Website. Using pre-designed elements on your Web page makes it easy and fast to design.

At the hundreds of free Web-graphic sites on the Internet you can find a vast variety of tiled backgrounds, buttons, clip art, letters and numbers, lines, rules, borders, arrows, and more. Many selections are animated. Sets are especially useful because you know that all the elements go together.

Bull's Backgrounds, Buttons and Bars (www.cbull.com) features all kinds of Web-page elements and many matched sets. Look for holiday graphics, backgrounds, matched sets of buttons, and other graphic elements. Just choose the ones you want, hold your mouse over your selection, and select "Download Image to Disk" in Internet Explorer or "Save the Image as" in Netscape to move the graphic to your hard drive.

If you don't find what you need at the Absolute Web Graphics Archive (www.webgraphicsarchive.com/web-

graphics), then perhaps you should rethink your concept. The problem is not in lacking resources, but in making up your mind.

Another place to find great backgrounds is The Background Archive at www.pixelfoundry.com. Here, simple text links lead you to different categories of backgrounds. While these were not designed especially for holidays, many of them can be used in somewhat more subtle creative designs.

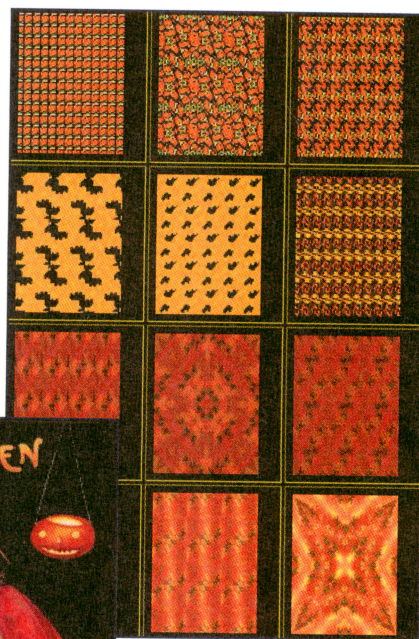
The Free Stuff Center gives you numerous categories of free art such as buttons, bars, 3D animations, icons, and much more. Just click on the image you want and it will appear in a separate browser window. If you're sure that's the one you want, lean on the mouse and download it from the site and incorporate it into your Web page (www.freestuffcenter.com).

Fonts

With HTML, you have only two fonts at your disposal — Times Roman and Courier. Not terribly exciting, but hey, they get the message across. Microsoft also makes available a number of special fonts, including Verdana and Georgia screen fonts, which you can download from Microsoft's Website (www.microsoft.com/typography/font-pack/default.htm).

Using a Web authoring tool, you can easily specify which fonts to use. The main thing to understand about Web fonts is that any font you use must be in the viewer's computer for them to see it. If not, the font will automatically default to Times Roman, no matter what your chosen font.

One way around that is to create a picture of your type using any typeface you want for headlines and decorative type. Making the type into an image lets you place it on your page as an image,



Free! If you're looking for decorative graphics, try ready-made Web backgrounds and borders.



and that way everyone will see it the same way.

Just choose any font in your system and use Adobe Photoshop's Type tool to set the type. Then optimize for the Web and place on your Web page.

If you don't like any of the fonts you have, there are many places to procure

Ye Olde Code

Open SimpleText and type:

```
<html>
<head>
<title>Greetings</title>
</head>
<body bgcolor=red text=white
background="background.gif">
<center><h1>Greetings!</h1>

<p>Wishing all of our friends
the best of holidays!
<p> Add more text and as many
paragraphs as you want.
</body>
</html>
```

Note: Image Height and Width are in pixels. Don't forget to insert your main image and a background if you want!

Fonts

Acid Fonts-www.acidcool.com
Eyewire-www.eyewire.com/fonts
The Font Pool-www.fontpool.com
Type Euphoria-<http://fonts.linuxpower.org>

fun, free fonts, such as MacFonts.com (www.macfonts.com), Kemosabe's Font Archive (www.fontaddict.com), and Font Freak (www.fontfreak.com).

All Our Relations

The sentiment behind an e-card is the same as that of a construction paper card or trusty old Hallmark. Whether you send a pre-made card, or make an elaborate Web page for your holiday greeting, your recipients will have the same warm feeling. After all, it's the thought that counts. **MHJ**

Edu

The fall semester is only about a month old, yet the student in your life has complaints galore, including stuffed computer labs. Direct them to edu.com, where they'll find discounts on hardware

(perhaps it's time for his or her very own iBook), as well as software, textbooks, and even long-distance services.



The site is geared toward verified college students, and high school seniors are encouraged to join before their college careers begin. Membership is free and eduPoints are gained for completing surveys, referring friends to the site, and for purchases — get 2,014 points for the iBook bundle, which includes Office 98 and an Epson Stylus 760 printer.
www.edu.com,
888-825-5338

Sweater Weather and All It Brings

Autumn is a beloved time of year. Perhaps it's the sweater weather or changing foliage, college football, or the start of a new holiday season. This month we'll take a stroll through a veritable pumpkin patch of sites, with shapes and shades for the whole family.

Tombstone Productions

Everything you need for Halloween — masks (including Herman Munster), accessories (including Austin Powers' teeth), sound effects, and special effects (including fog and lightning simulators) — awaits you at this site. You could very well leave here with costumes for the entire family, not to mention all the necessities for a custom-made haunted house (wouldn't visiting trick-or-treaters like that?!). This site is known as the biggest horror retailer on the Internet, so cover your eyes if you're easily spooked.

www.tombstone-productions.com

Tailgate Town



My brother was, is, probably always will be, a tailgater — a person whose pre-game jitters match (if not

exceed) those of the players on the field. If someone in your family is a football fan (most families have 'em) who considers tailgating a pre-sporting-event sport, point them to this site. It's a tailgate haven with tailgate tables, chairs, blankets, grills, footstools, and even Baggio, "the ultimate tailgate game" that's similar to horseshoes and played with bean bags. Most gear comes

custom-designed with your favorite pro or college team's logo — get your very own Connecticut Huskies director's chair, a Florida Gators Baggio board, or a Nebraska Cornhusker stadium cushion for comfort when the game finally begins.

www.tailgatetown.com, 704-554-7665

Hickory Farms

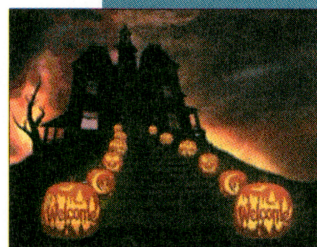
The Hickory Farms of my youth meant cheese and cracker samples on the way into and out of the mall. Now you can skip the mall and visit its Website, where you'll find tasties for the whole holiday season. Get a head start on Thanksgiving preparation with specials on cheese, nuts, fruit cakes, and even turkeys.

www.hickoryfarms.com, 800-442-5671

Pumpkin Masters

Even if your family doesn't get excited about Halloween (unlikely), 'tis still the season of pumpkins. An afternoon of carving means an afternoon of family fun. A friend of mine introduced me to Pumpkin

Masters products a few years back, and, by golly, they really help to create wondrous



pumpkins! Go to this site for kits to help you turn your pumpkins into competition-worthy pieces of art. Adults and kids alike will be thrilled with the results, and your neighbors will undoubtedly slow down for a closer look when they pass by.
www.pumpkinmasters.com,
303-860-8006

Signal Maps

Seeking an interesting radio station? Check out the Directory of Online Radio Stations at www.webradios.com. It provides you

By Jackie Dove

with an innovative graphical interface

with which to search by region or genre. The interface to the search engine is a map of the U.S., Europe or Scandinavia, from which you can zoom in and out. When you pick the genre of your choice, and assuming there is a station in that category, an icon appears on the map that you can click to hear the audio. Pick a genre, then use the map to zero in and pick up a signal. Most stations were functional — though we found some duds in the crowd — while others included commercial messages.



Give a Listen: Radio Stations Enliven the Web

When you're inspired to switch on your Mac, plug in yer 'phones (unless you're in the house alone, and then who cares?), and groove to some tunes, or maybe just to hear your favorite talk show online, check out the Web. It's a vast gateway to Internet radio. Okay, so where do you go to find stations?

You could start by tuning into the numerous audio and video channels featured by RealPlayer 7 (in either the free or the Plus version), at www.real.com. You can also plug into one of the many QuickTime channels from Apple's Website at www.apple.com.

But say you don't want to listen to Radio Disney or NPR. You want to hear something different, something really exotic, something genuinely alternative, or simply something that you've never heard before. A number of Websites offer excellent listings of Internet radio stations. Here are a few that provide both pre-recorded segments and live streaming broadcasts.

Internet Radio List

This site provides a comprehensive directory of streaming broadcasts from around the world. Listings are divided into categories such as classical, college radio, country, and more. Just click to choose from any listing within the category.

Want to tune into a Taiwanese radio station? No problem. We listened to a local music broadcast from Paraguay (in Spanish). This site features every



imaginable category of radio station and lets you choose your broadcast from convenient text menus. A search engine on each page gives you access to additional stations, and also offers advanced search techniques. When I clicked to listen, it either streamed through my MP3 player or my RealAudio Player, or gave me a message that the station was not broadcasting, sent an error message, or did not play.

www.internetradiolist.com

MIT List of Radio Stations

Okay, it's not flashy and commercial, but it sure is functional. The MIT List of Radio Stations on the Internet at <http://wmb.r.mit.edu/stations/list.html> helps you find the station that's right for you whether you're looking for a specific station or broadcasting genre.

The site's database lists some 9,000 stations worldwide. If you're looking for stations in the U.S., you'll find a map to click and an easy-to-read, table listing the call

letters of the station, the location, format, and a Website link.

This site lets you conduct location searches, call letter searches, as well as more advanced searches.

We really like this one!

Radio 4 All

If you're into underground radio and alternative points of view, you'll want to stop by Radio 4 All, where you'll find links to all kinds of programming, so-called pirate stations, and micro stations. Radio 4 All features a large number of free and independent stations from all over the world, as well as individual radio programmers. Check out Radio Free Nashville, Full Logic Reverse, TUC Radio, and more. www.radio4all.org

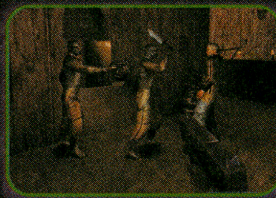
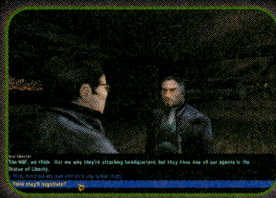
TERRORISM IS AT AN ALL-TIME HIGH. COINCIDENTALLY, SO IS HIS JOB SECURITY.

What has the world come to?

Chaos. Danger. Drugs. Disease. Pollution. Conspiracy. Paranoia. For nano-technologically augmented terrorist agent JC Denton, it's just another day. Stealth, strategy, and action, unravel the conspiracy and save the world... and your own butt.



DEUS EX



Order Now at:

www.aspyr.com 1-888-212-7797



EIDOS
INTERACTIVE

ION
STORM


ASPYR

westlake
INTERACTIVE



Deus Ex, ION Storm names and logos are trademarks of ION Storm, L.P. All Rights Reserved. ©1999, 2000 ION Storm. Eidos Interactive and the Eidos Interactive logo are registered trademarks of Eidos Interactive. ©1999, 2000 Eidos Interactive. The ratings icon is a trademark of the Interactive Digital Software Association. The Aspyr Media logo is a trademark of Aspyr Media, Inc. Macintosh is a registered trademark and the MacOS logo is a trademark of Apple Computer, Inc. All other trademarks are the property of their respective holders.

Your Mac Can Help Your Garden Grow

As crisp autumn days move us toward the first cold waves of winter, many avid gardeners spend time clearing, winterizing, and putting their gardens in good order for the anxiously awaited buds of spring to appear.

Gloves and spades are safely stored, and catalogs of plants, flowers, and bulbs start inundating our mailboxes. This year, as you curl up with these catalogs and begin planning for your next planting season, think about how your Mac can help you in the garden. Admittedly, there isn't much gardening or landscaping software for the Macintosh, but there are two programs that deserve your consideration: Terrace Software's Mum's the Word Plus and Sunset Garden Problem Solver. Add to these a plethora of Websites — they far exceed the catalogs you'll receive — and you've got a winter's worth of garden-preparing delight in store.

One of the biggest problems with landscaping is finding the right plants for your garden. Each season I wonder if I'll face a catastrophe of colors, sizes, and needs, or will I be graced with something beautiful

By Cathy Parise

and fulfilling to the eye, nose, and spirit?

Terrace Software came to my rescue with Mum's the Word Plus, a program with a searchable database of plants to help find those that best suit specific climates and interests. I limited my search to perennials and biennials that tolerate long periods of unintentionally imposed drought, that attract welcome wildlife (such as butterflies and hummingbirds), are low maintenance, and do not crowd each other out.

After Mum's Plus successfully found plants to meet my requirements, I had to know what my garden would look like once the plants matured and bloomed — a new garden generally looks meager, but it won't stay that way. Mum's helped me determine where the plants should be placed, and then offered a front-elevation view to see what my garden will look like in two to 10 years, including how my plants will individually mature. Mum's also allowed me to cycle through a series of seasons — early, mid, and late spring, for



example — to see bloom periods and what plant combinations will look like once they've grown in together.

It's as easy to design a single garden space as it is to design an entire landscape because the design of Mum's is

based on a drawing program that's drag-and-drop easy, making it very user-friendly. It draws the plants to scale, labels them, calculates how many of a particular plant is needed to fill a designated space, and even keeps a list of plants used and the number of each — these features give the novice a big boost and the pro a nice assist.

Contribute further to your plant library database with Terrace's Plants West, an additional piece of software for an extra \$39, which contains 300 plants that are hardy in USDA "Plant Hardiness Zones" 9 and 10 (e.g. Barstow, California, to Houston, to Miami), and therefore suitable to dry climates.

Terrace Software's latest release of Mum's Plus will operate on OS 9. It's the only landscape- and garden-design software sophisticated enough to handle all the complexities mentioned, making it well worth the investment.

Once it's all planted and under "control," however, what should I do about those pesky bugs and other fiends of nature that threaten to foil my beautifully designed landscape? Sunset Garden Problem Solver offers the solution. The program diagnoses hundreds of garden problems. Got pests? More than 400 pests, diseases, weeds, and cultural problems are covered by the program's Plant Doctor. Gypsy Moths are a real problem in my area, and the Problem Solver showed me how to check for and destroy their eggs, as well as how to trap and destroy adult females and larvae.

Next, how do I prune trees and bushes that looked good when I planted them, but at some point started acting out some science fiction story in their quest to take over? Fortunately, Sunset's Garden Problem Solver is not just about problems. It offers tips and techniques to help maintain a healthy garden, such as pruning back those unruly bushes and trees before they stage a total takeover. Plus, there are 150 step-by-step solutions and videos to provide more detailed instructions, so my pruning job will look like I hired a pro instead of doing it myself — the program's pruning tips will help me take control again. Sunset has covered everything from aerating your lawn to working safely with pesticides, from fertilizing roses to mulching.

Identify your climate by USDA growing zone (a map will have this information if you don't already know) and Sunset's garden calendar offers a "to do" list of monthly tasks appropriate for your climate. Add or delete items as desired. When done, print out month-by-month reminders of your garden's upkeep and pampering needs. No more forgetting when to spray the fruit trees, prune the roses, start the seeds for the vegetable garden, or fertilize the lawn — it's all there for you.

Easy, quick, and filled with the resources and information from Sunset's years of experience, it's a program every gardener, novice or pro, should have. Be warned, though: Sunset is phasing out its garden software, so this program will only be available for about two more years. **MHJ**

This is MacHome's family issue, so let's include (and interest) kids in the beloved activity of gardening. A rich assortment of Websites features articles, information, ideas, and activities for gardening with kids. Below are the best of these. Kids can do projects through the winter to build their excitement.

National Gardening Association's (NGA) Kids Gardening

<http://kidsgardening.com>

NGA covers many areas of gardening with kids, but this site is the best. Along with Aggie Horticulture, it's the most comprehensive site of resources, information, and activities on the subject of kids and gardening.

Aggie Horticulture

<http://aggie-horticulture.tamu.edu/kindergarten/index.html>

The mother lode on gardening with kids includes Kids Gardening Resource, which has great articles on gardening with kids and an extensive list of sites emphasizing children's gardening and related subjects. There's also KinderGARDEN, which offers an introduction to the many ways children can interact with plants and the garden. The Special Tips for Gardening with Kids! is a must-read for parents before handing over the hoe.

Gardening for Kids

www.geocities.com/enchantedforest/glade/3313

Several unique features for kids include Flower Combinations, Kid-Friendly Plants, and a Kid Critic archive where kids tell about their favorite plants.

Kid's Valley Garden

www.bonus.com/bonus/card/kidsvalley-garden.html

Written for children, this site gives instructions on planning, planting, and maintaining a garden. Offers advice on entering competitions to show off the fruit of their efforts!

The Backyard Gardener

www.backyardgardener.com/pumpkin.html

The Pumpkin Patch is for kids who want to grow something really fun — the Atlantic Giant Pumpkin. This site has everything from planting and cultivating, to a neat pumpkin that follows the cursor while playing Charlie Brown's "Great Pumpkin" music!

The Whole Herb Kid's Corner

www.wholeherb.com

Detailed directions on growing an indoor herb garden and advice on what to do with the herbs after they're grown: recipes, body care, and crafts.

Need more resources? The Web has an incredible number. An exhaustive search resulted in this list of the best, most comprehensive sites and what they offer.

Old Farmer's Almanac

www.almanac.com/garden

Gardeners have long depended on the sage wisdom and advice of this ever-reliable oldie-but-goodie. The site covers everything from garden myths to extraordinary garden tools, from weather information to home remedies. Truly a NEW Farmer's Almanac.

GardenNet

www.gardenet.com

Once into GardenNet, you may need an iBook with an AirPort to get back outside into your garden. This robust site has everything: links to other garden sites; a garden shop and directory for online shopping sites; guidebooks on gardens to visit; and a garden catalogs request section.

Virtual Garden

www.vg.com

One of the best gardening sites. All gardeners should bookmark and regularly check the searchable links database, Dig the Net, which reviews and rates Websites related to a wide array of gardening topics.

Sunset Garden Problem Solver, \$40

Sunset New Media
800-634-3095
www.sunsetmagazine.com/books/cdroms/cdframe.html

Mum's the Word Plus, \$95

Plants West, \$39
Terrace Software
617-396-0382
rln@metasoft.com

Global Classroom

The Internet is a wondrous place indeed, especially when I hear about destinations like

ePALS Classroom Exchange. Kids studying social studies and world history can say

hello to flesh-and-blood

peers of various cultures around the globe. ePALS has grown into the largest K-12 classroom community on the Internet. Established in 1996, members from more than 150

countries have joined to use ePALS' free collaborative technology, where teachers can register a profile of their classrooms and then springboard to find other classrooms to communicate and collaborate with on cultural subjects. "I am so pleased with the ePALS we are corresponding with [from] classes all over the world! I teach 4th grade and have incorporated language arts, social studies — landforms, regions, continents, and temperatures — into the friendly letters my students are sending to their ePALS," says Sherry Tussey, a teacher at Thorpe Gordon Elementary School in Jefferson City, Missouri. "My curriculum has become more stimulating and interesting." The site hosts email, chats, interactive tools and projects, and resources

for enhancing students' learning environments.
www.epals.com,
613-562-9847



Always Thinkin'

Edmark, creators of the *Thinkin' Things* educational CD-ROM series for children, now offers edConnect

Membership, an online destination for education solutions. It features a collection of Edmark's award-winning quality software, software-management solutions,

online resources, offline activities, and lesson-planning assistance for teachers to incorporate into their classrooms. edConnect will be sold to schools and districts, and was scheduled for a September release.

www.edmark.com, 800-362-2890



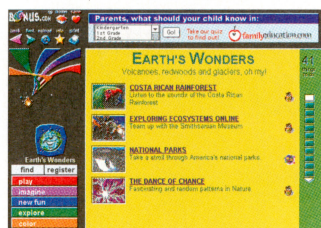
Early Resume Material

Bonus.com, a "SuperSite" where boys and girls go to play and learn, is kicking off a nationwide search for 12 of them to join its Kids Advisory Board. Kids between the ages of 6 and 13 are encouraged to submit an essay based

on the theme, "What I Would Do if I was Managing Editor of Bonus.com." Essays — judged on creativity, enthusiasm, and originality — will be accepted starting October 3, through

December 20. The chosen few will collaborate with the grown-up editors at Bonus.com to build a Website that's "bigger, better, and more fun." After they've contributed to the site's progress for a year, they'll receive a \$500 U.S. Savings Bond and other prizes.

www.bonus.com, 650-813-0100



Destination Known

High school students gearing up for their college days, as well as those already in the throes of daily college living, should check out this site.

MyRoad helps incoming and present coeds plan for the future. With links to explore college majors, thousands of colleges and universities, and career paths, it's a must-see for those who want to focus on a goal early on. Of particular interest is the Mentor's Corner, where professionals tell how they reached their professional goals. Also check out Sound Off for first-person accounts of college living.

www.myroad.com, 888-331-8300



Virtual Library

Much like your local library, ebrary will be free and open to the public sometime this Fall. The site will host more than 500,000 books, full-text viewing, and reference tools.

The company's model is designed to augment libraries and book sales, all the while satisfying the information needs of students, researchers, and the general public.
www.ebrary.com, 408-991-0949



Study Up, Cheaters

Teachers can rejoice, and feel free to leave their classrooms after administering a test. Need to use the restroom? Go ahead. How about that second cup of coffee? By all means! Data By Design's Test reGenerator to the rescue. It's a program that makes cheating virtually impossible because it scrambles questions on tests. Test reGenerator also stores test questions permanently, which allows teachers to build new tests from existing questions in little time. It should be in its final version by the time you read this.

www.databbq.com

Pooh, Loggins, and You



Of course the music

matters more than the artwork, pictures, and liner notes inside the new CD by one of your favorite artists, but if you're like me, you get almost as excited to look as you do to listen. Club Photo, an online photo-sharing destination, has teamed up with singer Kenny Loggins to turn his CD *More Songs From*

Pooh Corner into something extra special for the young ones in your life. Club Photo will use the photo of your choice to make a personalized jewel case insert for the latest Loggins CD. The idea makes for a wonderful gift idea and memento.

www.clubphoto.com/shop, 408-557-6743

PokéMac Fever

The next phase of the Pokémon craze is brought to you by Mattel Interactive. PokéRoms — mini-card shaped CD-ROMS that feature multi-player quiz games and puzzles focusing on math, science, reading, and social studies — have been available since July for 5-11-year-olds. Due in November are the first two in a series of educational titles featuring kid-favorite Pokémon characters, including Misty and Pikachu.

Pokémon Island Rescue (for grades 1-3) and *Pokémon Wake Up, Snorlax!* (for grades 3-5) will feature adventures based on the popular TV episodes, and will have your youngsters exercising their reading, math, and science muscles.

Care Enough to Send the Very Best

Corbis Creative Studio, an online destination where you can create

your own cards and calendars, is now available for Mac users.

All you need to turn your desk into a mini stationary store is an Internet connection, an inkjet printer, and some quality paper.

Membership is free. The Website hosts high-quality images (for holiday and everyday cards) that rival those of professional cards. So choose your own image and write a personalized greeting for a card that gives your recipient a warm and fuzzy feeling inside.

www.corbis.com,
800-260-0444



Social or Alone Time

eHobbies is determined to create a "new world for hobbyists." The online destination was formed in March of 1999, and now hosts nine hobbies, including the recently added Astronomy, Birding, and Comics & Action Figures categories. Both novice and seasoned hobbyists are welcome to discover informative articles, tips, reviews, and how-to guides, as well as chat and message boards for sharing ideas and inspirations. The site also has a store full of hobby products, and auctions created specifically for hobbyists. So whether you're thinking of getting away by yourself to look for a particular species of bird in the heavens, or meeting with comic-book-collecting friends to show off your collections to one another, this is the site to set you on your way.

www.eHobbies.com, 310-582-7500



Freddi Fish's One-Stop Fun Shop

We don't generally have people on hand at *MacHome* to give us their two cents worth before we write up product reviews, but Amy TerKeurst, fourth grade niece of publisher Susan Ford, was in the office in July for a couple days and I asked her to play *Freddi Fish's One-Stop Fun Shop* along with me, and to share her opinions about the title.

The CD-ROM serves as a crafts workshop where youngsters design and print goodies including calendars, party hats, postcards, and airplanes, to name only a few. It was amazing to watch Amy navigate the software. "It could be tricky if you don't know your way around, but I've played for a couple days, so it's easy," she says. She made bookmarks, and door hangers reading, "Sssshhhh, I'm Working," for everyone in the office. Each project in the *One-Stop Fun Shop* allows young artists to

design their own layouts or customize ready-made templates with paint tools, including a bubble wand and a whipped cream can. Print in black-and-white if your child prefers coloring with crayons or magic markers. Amy showed me how simple it is for kids to save and input their own designs from one project to the next. "It's really cool — I prefer making my own," she says.

Humongous' appeal is widespread because of its smart and absolutely adorable characters, which

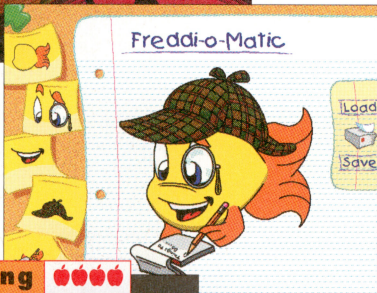
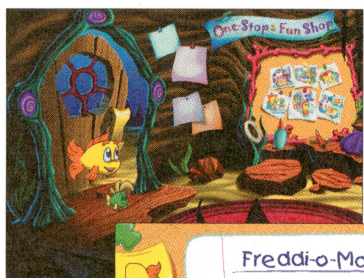
became even more apparent as I watched Amy play. (After all, this grown-up reviewer is just as smitten as any youngster.) Amy and I had fun with Luther- and Freddi-o-Matic, activities that allow kids to play with

the style of the two main characters. Amy's favorite is "Freddi dressed up like Sherlock Holmes," and my favorite is Luther dressed as an astronaut.

Amy, who regularly plays *Chessmaster 2000*, pointed out *Freddi* downsides as well, including the software's lag: "I hate how slow it goes." A warranted complaint, as she played on an iBook with OS 9 and 64MB, which far exceeds the title's minimum requirements. She also expressed disappointment that there aren't games on the CD-ROM. "Making stuff might get boring, so games would've been fun too."

Overall, though, *Freddi* swims away with kudos. "For what it does, it's really good. I'll tell my friends." Thanks for your help, Amy!

— Carolyn Blackburn



rating ★★★★★

\$20, Humongous Entertainment
Ages 3 to 8
800-499-8386
www.humongous.com

Reader Rabbit 2nd Grade

The popular Reader Rabbit series has released *Reader Rabbit 2nd Grade*, a fun-filled adventure that will captivate most kids. The activities, chock full of bright, colorful screens and friendly characters, are interesting enough to hold the attention of 6-year-olds, but the title will probably only appeal to 8-year-olds the first time through.



The adventure has kids helping Sam the Lion overcome challenges — like identifying plurals and grabbing them, and finding and grabbing words that have a particular sound — earn points, and collect widgets on the way to finding Reader Rabbit. An assessment test personalizes the program for a number of children, placing each in the appropriate skill level, depending on their responses.

For classroom teachers and parents, a chart identifies the language arts, mathematics, science, and critical-thinking skills being covered.

Good verbal instructions prepare children entering each new activity. Only the Skillway activity has on-screen instructions, but they are difficult to see, understand, and learn. There are actual pitfalls kids can fall into, causing them to repeat steps over and over. They can get around the pitfalls by jumping or leaping over them, but it's not explained anywhere how they can do this, which can be very frustrating.

All in all, though, it's a good opportunity for parents to give this age group something challenging and fun that is also educational.

— Cathy Parise

rating ★★★★★

\$20, The Learning Company
Ages 6 to 8
800-358-9144
www.learningcompany.com

Guitar Method 1.2

Sometimes, you gotta just take a break from the busy busy schedule, turn off the ol' cell phone, kick back, and play a little guitar. If you want to teach yourself because you can't quite pony up the time and money for lessons, then you might want to take a look at eMedia's Guitar Method 1.2.

The first lesson covers the different kinds of guitars, where the bridge of the guitar is, and how to fit the instrument with strings, and the subsequent lessons introduce you to the basics of strumming and picking. Guitar Method provides a voluminous

assortment of tunes, as well, primarily from the Baby Boomer generation — you'll get samples from Dylan, the Stones, and Jim Croce.

Guitar Method 2, another title from

eMedia, picks up where this one leaves off, and takes you into the more advanced realms of guitar playing (we reviewed the first version of Guitar Method 2 in *MacHome*, September 1998).

You'll find that using this CD is easier than using a book, because it lets you hear any melody or chord that you're learning. Guitar Method can even record your attempts and play them back

for you. This new version offers an Animated Fretboard tool — with the click of a button, you'll see a fretboard with finger positions that

move with the music in real time. As someone who's spent hours struggling over printed music, I really appreciated this addition.

The title is a bit rough in places — the Mac scroll bars, for example, are grayed out unless you click on them — but overall, Guitar Method 1.2 is an excellent entrée to guitar.

— David Weiss

Winnie the Pooh Activity Center

As I played Winnie the Pooh Activity Center, I was re-introduced to A.A. Milne's characters, including Eeyore, Owl, and Piglet, and I thought, it's no wonder Pooh and his friends are cherished by generation after generation of children. The CD-ROM hosts six activities, and the overall lifespan of the title will depend on your child's age. My guess is that the younger set will be more captivated than the older.

Kids will love Decorating Owl's House, an activity that allows them to decorate the empty room on the screen

with items, such as accessories and toys, from designated

boxes. They will also enjoy Read the Story, Find

the Bees, which has them find

bees for Pooh within the turning onscreen

pages of a delightful story. Come Fly a

Piglet will likely

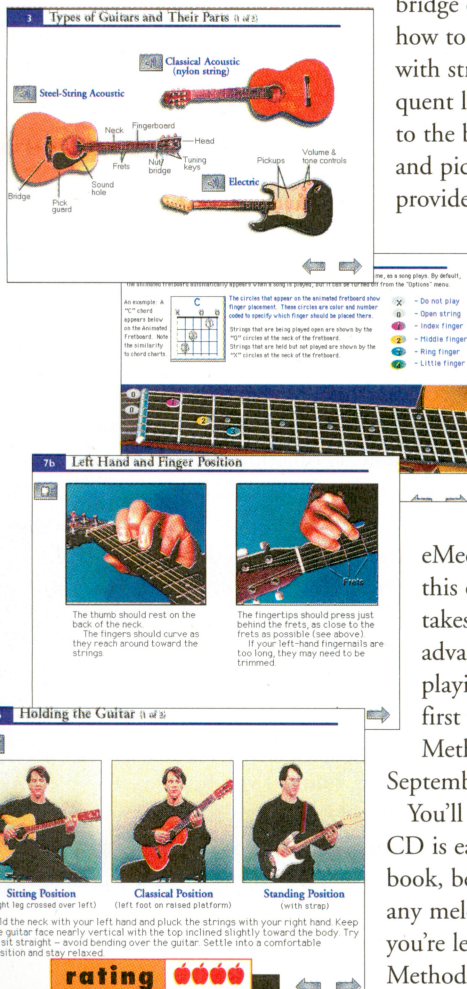
induce giggles as

kids guide Pooh and Piglet over or under obstacles they encounter as the wind moves them along.

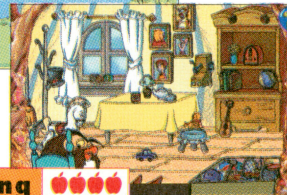
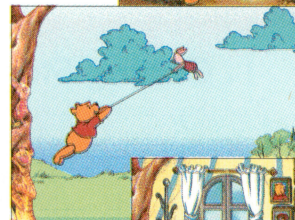
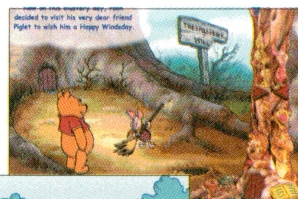
Directions are given by characters at the onset of each game. Younger kids will no doubt need guidance from mom and dad, though. Particularly when playing Tigger's Hillside Hop, in which letter keys move onscreen characters — the only way to know this is by reading the manual.

If your child loves Pooh, he or she will no doubt come back to this title again and again, but if your little one isn't particularly drawn to these characters, it's likely not worth the \$30 price tag.

— Carolyn Blackburn



\$60, eMedia
888-363-3424
www.emedia.org



rating

\$30, Disney
Ages 3 to 6
800-228-0988
www.disneyinteractive.com

A Simple Pleasure

iMovie-Making Is a Snap

The tech-savvy and tech-phobic alike will appreciate the simplicity of iMovie. The program is downright easy. If you've ever wanted to film a holiday get-together, for example, and turn it into a mini movie to share with friends and distant family, iMovie will fast become your favorite application.

1. Getting Started

The three main iMovie-making ingredients are as follows: a DV iMac or other FireWire-equipped Mac (such as a Power Mac G4 or a PowerBook) with Mac OS 9.0.4 or later, QuickTime 4.1 or later, 16MB of free memory, and 2GB of available hard disk space (recommended); the iMovie software; and a digital video camera. I had the pleasure of using a Canon ZR10

(reviewed in this issue). Supported camcorders are listed at

www.apple.com/imovie. iMovie 2 was announced at Macworld in July, but I used iMovie 1.0.2, which is still available as a free download from Apple.

With iMovie, you'll find that transferring footage from camera to Mac is lickety-split — both Mac and digital video camera support FireWire, the technology at the helm of iMovie making. Developed by Apple, FireWire is a high-speed data port for video capture and large file transfers. Did I mention it's fast? If your camera doesn't say it's FireWire-compatible, remember that FireWire is the nickname — you might have a camera that states its official name: IEEE 1394. (Manufacturers have also been forced to come up with their own names, due to Apple's rights over the FireWire name. Sony, for example, has named the FireWire port on some of its cameras i.Link.)

2. Capturing the Scenes

Before getting out there for footage, I recommend taking



a look at the manual that comes with your camera. It's sure to include explanations of your camera's functions, as well as suggestions on using them for the best effect.

Nobody likes to be told how to handle a video camera — it's the equivalent of playing with a new toy, after all — but some tips are necessary for a quality end product. When I got my first video camera a while back, I learned the hard way that unless I wanted *Blair Witch Project*-type

footage, I'd have to slow down, hold my shots, and stop randomly zooming in and out. If you know you'll be editing (and more importantly, sharing your footage), shoot a bunch, shoot steady, and focus on your subjects so that your frame is consistently filled with desired images. You'll also want to familiarize yourself with the audio input mic on your camera to accordingly monitor your volume (if narrating) and the volume of others.

3. Editing

Ideas for your little movie probably started to form somewhere in the midst of your shooting. You imagined how you would order the scenes, what kind of sound effects and music you wanted to input, and what you would title your masterpiece. iMovie's capabilities ensure that your vision becomes a reality.

First, import footage from your DV camcorder to your Mac using a 4-pin-to-6-pin FireWire cable. Simply launch iMovie, connect your machines with the cable, and the video will quickly be captured for use in iMovie's mini-editing suite, which will appear on your screen. What

By Carolyn Blackburn

you'll see is self-explanatory, with familiar Mac options like dragging and dropping, copying, cutting and pasting, and undoing mistakes.

The top-right of the screen holds your imported files. The top-left window is where you play your footage and view selected clips as you edit. Underneath it are the on-screen "remote control" buttons for playing, rewinding, fast-forwarding, and pausing your footage (much eas-

it will take up a chunk of space. Saving your finished movie on a DV tape, back through the FireWire connection to your camcorder, is recommended.

When your movie is on a DV tape, you can use the cables supplied with your camera to connect



ier than using the controls on your camera). At the bottom is the timeline, where you arrange selected shots into the sequence that will be your movie. And the special effects window is at the lower right, including prompts to add transitions, sound bites, titles, and music.

4. Distribution

Once your movie is complete, there are several ways to share it with others. Just like a precious Word file, the first step is to save your project. Once you've saved, you might not want to leave your movie in your hard drive, as

the camera to your VCR, and from there make VHS copies of your movie. (Bring out the manuals of both the camera and the VCR for any pertinent information before you start recording.)

If you've got a CD-RW drive (read "Burn Baby Burn," *MacHome*, August 2000), you can share your movie by exporting it to QuickTime (there's a QuickTime compression option within iMovie), and then putting it on a CD-RW disc for future viewing on your Mac.

If you don't know about iTools, you should. It's a free service for Mac OS 9 users, and provides the third way to share your movies. With iTools you can set up your own homepage, and then use iDisk — you can purchase up to 400MB of space for photo and iMovie sharing — and QuickTime to show your movie to the masses.

The last way to share your creation is via email. Of course! Another QuickTime option within

iMovie is to compress your movie for email, making the file as small as is necessary to share it this way. Not all of your friends and family will be able to

iMovie 2

iMovie 2 comes with the new Macs, including the G4 Cube and DV iMacs, and was expected to be available as an electronic download from the Apple Store in September. It includes even more goodies than the original, such as sepia tones, slow motion and speed-up options, improved onscreen title controls, and the aqua interface that will grace OS X.

What? No DV?

You've got a USB Mac and a non-DV camera. You won't be able to use iMovie, but there are other options. XLR8's InterView by Interex allows you to hook up your non-digital camcorder to your Mac, and then convert your footage into QuickTime for email or Website sharing. InterView presently ships with Strata VideoShop, which allows you to edit your footage similarly to iMovie. There's also Global Village's VideoFX, another video-capture option for non-DV cameras. VideoFX saves your footage in QuickTime and allows you to edit your work. www.globalvillage.com, www.xlr8.com

view it in this format for varying reasons, including ISP restrictions.

Wrap!

The bottom line is that iMovie-making is easy, really. Had I not gone through the process myself, I wouldn't have believed it. I hope I've encouraged you to realize you can do it as well. With guidance from Apple's Website, any number of online tutorials, and books — I referred to the wonderfully accessible and detailed *Making iMovies* (\$40, Peachpit Press), by Scott Smith — you'll be an iMovie-making mogul in no time at all. **MHJ**

Looks Aren't Everything

By Carolyn Blackburn

Particularly when you're talking about

speakers, it's what's inside that counts. But the new iM-700 ICE speakers by Monsoon fit both bills. Technology that produces super sound dwells inside a delicious shell — ICE color flat panels that'll match your G3 or G4, to be exact. The folks at Monsoon know that Macs are used for all types of media production in the professional and personal realm, so grab a pair of these speakers if you're a sound editor or a game player.

It's unlikely they'll let you down.
www.sonigistix.com,
 877-722-8346

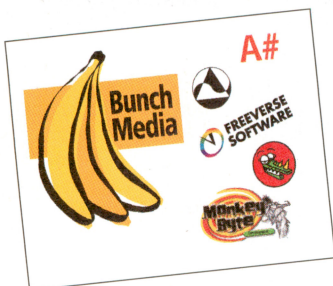
Come Together

Five independent development and publishing houses announced the formation of Bunch Media, a group dedicated to bringing new entertainment titles to the Mac. The company will serve as a consistent front to retailers,

distributors, and catalog researchers, while allowing each of the founding companies to retain its individuality. "We think we're better off as a team than on our own. Bunch Media will meet the needs of resellers looking for exciting titles released either simultaneously for Macintosh and Windows, or exclusively for Macintosh," explains

president Jason Whong. Bunch Media is made up of Green Dragon Creations, creators of *Gridz* and developers of Access Software's *Links LS 98*; Delta Tao, creators of *Clan Lord*, *MacHome's* Editors' Choice winning role-playing game; A Sharp, makers of *King of Dragon Pass*; Freeverse, creators and publishers of *Burning Monkey Solitaire*, and Monkey Byte Development, publisher of *Distant Suns* and other shareware hits.

www.bunchmedia.com, 662-473-4225



In G.O.D. We Trust

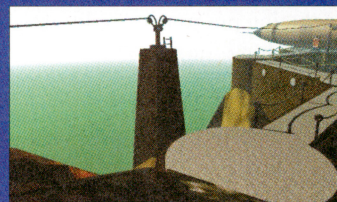
Gathering of Developers, a multi-platform game publishing company, showcased five new games for the Mac at Macworld in July. Developed by Terminal Reality, *4x4 Evolution* is an off-road simulation game that puts drivers behind the wheel of their favorite SUV or truck. Due by the end of September, it features 16 uniquely designed tracks, each with its own music score and difficulty level. Available by the end of the year is Ritual Entertainment's *Heavy Metal: F.A.K.K.2* (Federation Assigned Ketogenic Killzone), a third-person 3D action/adventure game based on the upcoming sequel to the animated film, *Heavy Metal*. Bungie Software's *Oni*, another 3D action/adventure game starring Konoko, "elite cop and one-woman SWAT team," is slated to hit the shelves in January. *Rune*, co-developed by Human Head Studios and Westlake Interactive and due out in November, is another 3D action/adventure game that steeps its players in the Dark Ages to fight off Nordic creatures. PopTop Software's *Tropico*, a 3D building, strategy/simulation game, is due sometime in 2001. Players take on the role of a new dictator of a remote

Caribbean island — "diplomacy and politics will factor heavily in *Tropico*" — and if growth is poorly planned, the economy may falter and the population may revolt.
www.godgames.com, 214-303-1202



Myst Reborn

If you've never played *Myst*, the surreal adventure game that drew millions with its evocative, phantasmagoric worlds and its tricky, integrated puzzles, then now just might be the time. Re-



released by Mattel Interactive, *Myst Masterpiece* (\$30) begins with the original, and adds animated touches, enhanced graphics and sound, and a built-in, online hint guide for when the going gets perplexing.

www.mattelinteractive.com,
 800-358-9144

— David Weiss



Creation is the easy part...
Keeping them under control
is another story.

The SIMS™



The game that hits close to home.



westlake
INTERACTIVE



© 2000 Electronic Arts Inc. The Sims, SimCity, Maxis, and the Maxis logo are trademarks or registered trademarks of Electronic Arts in the U.S. and/or other countries. All rights reserved. The Aspyr Media logo is a trademark of Aspyr Media, Inc. The Westlake Interactive logo is a trademark of Westlake Interactive, Inc. Macintosh is a registered trademark and the MacOS logo is a trademark of Apple Computer, Inc. All other trademarks are the property of their respective holders. Made in USA.

Baldur's Gate

Concerned about crime in the streets? Brace yourself. You are about to become a crime statistic in your very own home — victim of a blatant, dastardly theft.

Baldur's Gate, named role-playing game of the year by several PC magazines in 1998, is finally ready for the Mac, and it's going to steal your leisure time. All of your leisure time.

A true role-playing adventure set on the Sword Coast of Forgotten Realms and using traditional Dungeons & Dragons rules, *Baldur's Gate* will grab your attention, charm you, and ultimately turn you into a bleary-eyed addict.

You are a youngster living in the relatively safe haven of Candlekeep. (You build your own hero, an adventurer who becomes the focus of all later action, choosing gender, race, character type, and even moral stance.)

You don't know much about your background because your protector, Gorion, seldom speaks of it. But he has told you that something strange and very dangerous is about to happen, and that you must arm yourself and learn to fight.

Candlekeep, then, becomes an excellent tutorial. Green-robed monks spout useful hints as you wander through the streets to buy equipment and sample a few simple sub-quests. Warriors teach you in painless battles how to fight singly and in groups. But the impending danger is near, and you must soon flee with Gorion. Once you leave the safety of Candlekeep, the true adventure begins.

Gorion exits gameplay almost instantly. But as you wander, you can add as many as five characters to your party, each with different abilities. Your travels will take you to towns, public ale-houses, private homes, peculiar temples, farms, meadows, and woodlands, most filled with assassins, monsters, and deadly perils. Stay with your party for safety. If any of your traveling companions die, they can be replaced. If you die, the game is over.

It's a huge, gorgeous world — five CDs worth — with no repetitious textures or tiles. Each scene is individually rendered. You'll visit dozens of towns and cities in which every building is carefully detailed. You'll wander through forests and meadows filled with vibrant colors. You'll cross mountains, lakes, and streams alive with all kinds of birds and animals.

Sunny days and starry nights give way to rain, thunderstorms, even light snow. You'll hear footsteps clattering, people shouting, cows mooing, chanters singing, doors opening and closing. And you'll find numerous side quests, items to search for, and scads of monsters waiting to cut you into little pieces.

Combat is a big part of the game. Battles erupt suddenly and foes come at you in real time. When that happens, pause the game by hitting the spacebar so you'll have enough breathing space to gather your thoughts and issue attack orders to each member of your

party. You'd also be wise to save often, since some of the early battles come before you have adequate arms and experience, and can quickly end in defeat and death.

The constant fighting serves a purpose. Your party will pick up valuable booty from corpses, and you'll gain new skills and experience points as you win battles. You can also add experience points through quests and reputation points through personal behavior.

Speak kindly, do good deeds, donate money to priests, and your reputation soars. Speak harshly, pick needless fights, steal from the innocent, and you can kiss your honor goodbye.

Dungeons & Dragons fanatics will delight in this game because it's one of the first to use advanced D&D rules. But *Baldur's Gate* is put together with such a user-friendly interface that

total novices will enjoy it just as much. The excellent engine, great graphics, and meticulous attention to detail made this game so thoroughly addictive and fun that the PC version sold more than a million copies. Mac players will no doubt increase that number.

Who says crime doesn't pay?

— John Lee



rating 
\$50, Graphic
Simulations
800-580-4723
www.graphsim.com

Tomb Raider: Last Revelation

Ah, Lara, you've come so far. Only a few short years ago you were an underground "grrrl" icon. But you quickly rose to superstardom and achieved popularity on a national scale, as well as numerous sequels with new and exciting adventures to take you around the world, and even gold editions of your games. When did it all start going downhill?

Well, never, really — I suppose Lara's still on top of her game. But in the latest edition, *Tomb Raider: Last Revelation*, the glamour and glitz of Lara's past is definitely fading. *Last Revelation* isn't a bad game; the level design is still quite good and the gameplay and story are still right up there with other blockbuster *Tomb Raider* titles. But there's something missing this time around. Maybe there just aren't enough jumping, button-pushing, swimming, and shooting puzzles left that we haven't already seen. Maybe Lara's losing her touch. Maybe it's me — perhaps I've just become immune to the same old formula, which is still effective, but doesn't quite cut the mustard like it used to.

Now, we'd usually be much harsher on a game that contained so little innovation and so much of what we've seen before. However, it's hard to be cruel to a game that, despite its unoriginality, is so much fun. The standard *Tomb Raider* formula is old, yes, but it's still a blast to play.

The game itself takes place in an ancient and forgotten pyramid in Egypt. This is a return to the style of the first game, in which Lara explored a single labyrinth of tunnels for the entire game. In *Last Revelation*, Lara is delving deep into the pyramid throughout the game; no boat chases or frozen wastelands here. This is a good thing, when you consid-

er that the constant globe-trotting took away from the story of the second and third games.

Despite a new setting, Lara doesn't really have any new tricks up her sleeve. The only notable change between this game and its predecessor is the training level at the beginning of the game: Instead of running around Lara's mansion in England, players learn the ropes in South America by playing as 16-year-old Lara. Interestingly enough, the only thing that's smaller on young Lara is her ponytail.

Tomb Raider: Last Revelation was originally supposed to be the last traditional *Tomb Raider* game. Instead of giving Lara her deserved, proper send-off, they watered down this game until it was an homogenized amalgam of all the clichés in the previous three

incarnations of the series. Thus, it ends up feeling less like a finale than like a rehashed sequel of the same caliber as *Police Academy 4*. After all, though, it appears that Eidos, the company that publishes all of Lara's exploits on the PC side, has new plans for her: There's another *Tomb Raider* in the works as we speak.

So, should you buy *Last Revelation*? If you enjoyed the first three games, definitely. However, if you've never played a Lara game before, you'd do well to start at the beginning and work your way up.

Last Revelation is really made for the true fan of *Tomb Raider*. It's not going to impress anyone who's seen the game before, but if you can't get enough of Lara's ever-expanding, um, presence, there's plenty here to keep you happy.

If you're looking for more of Lara's run-and-gun style of archaeology, this is your game. But if you're not in the mood for leftovers, I'd

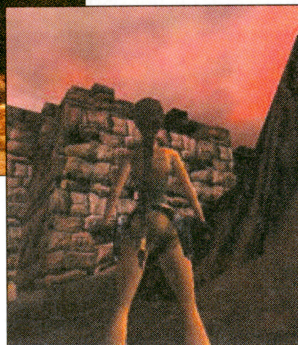
pass on Lara's latest exploits and spend my money on one of her previous games.

— Alex Handy



rating ●●●●

\$40, Aspyr Media
888-212-7797
www.aspyr.com



The Master System Folder

Creating an Emergency Backup

Nobody likes reinstalling the Mac OS; it's a time-consuming chore. Apple updates different components of the operating system so regularly that a complete system overhaul goes far beyond a simple reinstall of the Mac OS.

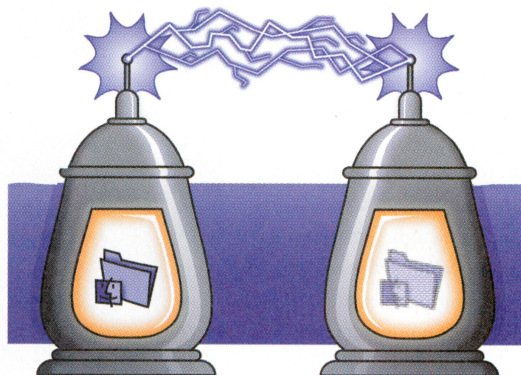
Already there are upwards of 20 updates that supercede a store-bought copy of Mac OS 9. So how can you keep a perfect copy of the operating system in case of emergency?

The first step is to build a flawless version of the System Folder. On your Macintosh's Software Install CD, find and launch the application titled Mac OS Install. Click Continue, and in the bottom left corner of the next window you'll see an Options button. Clicking that button takes you to a small dialog box that gives the option to "Perform a Clean Installation." Instead of simply overwriting software in your existing System Folder, a clean install creates a fresh, new System Folder. Now you'll need to collect software updates and install them. This can be done in one of two ways. One is to open the Software Update control panel and click on the big button marked Update Now. The second option is to go to Apple's Website and download the items you want to install. You can find

recent updates at <http://asu.info.apple.com>.

By Chris McVeigh

Assuming you don't run into problems, you will now have created a pristine version of the operating system. You can fill it out with third-party software, such as Adobe Type Manager, inkjet printer drivers, and fonts, if you like. Once you're happy with your System Folder, you'll need to launch Disk Copy on your hard drive. (You can do a search for the application with Sherlock if you can't seem to find it.) Select Create New Image from the Image menu. Choose Desktop from the first pop-up menu and give the disk image an appropriate name, such as "SystemFolderBackup.img." Select 320MB from the Size pop-up menu, click Save, and return to the Finder. You'll notice that a disk image named SystemFolderBackup is now sitting on your desktop. An icon of a blue disk on a white document named SystemFolderBackup.img also appears on your desktop. This is the actual disk image file, and you must be careful not to throw it away.



Drag your System Folder onto the disk icon. This will create a duplicate of the OS on the disk image. Once the copy has completed, drag the disk image into the Trash. Locate the blue-and-white disk image file and store it some place convenient, such as in your Utilities folder.

The next time you run into problems with your Macintosh, double-click on the disk image file to mount the disk. Copy the archived System Folder and place it at the root level of your hard drive where your current System Folder sits. Open the current System Folder, locate the System file, and drag it to the Trash. Now, open the duplicate System Folder and watch for its folders to adopt the standard System Folder icons. (For example, the Apple menu items folder will adopt an Apple icon.) This indicates that the duplicate System Folder has become the current System Folder. Drag the old System Folder to the Trash, and remove the word "copy" from the end of the duplicate System Folder. It's now safe to restart your Macintosh. When you reboot, you'll be using a fresh set of system software that has been untainted by crashes or other potentially scarring influences. **MHJ**

Announcing the "Educators' Special Edition" of The VR Worx v2.0

Partial Feature/Function Set

Generation of Object Movie
with a Panoramic Movie Background

Apple Scriptable and PC Scriptable

Source Image Reference Option

HyperStitch Option

Multinode Transitions

Optimized for the World Wide Web

Fast-Start Panoramas for the Web

Pano Image Import/Export at
10,000 x 3,000 pixels

Built-In Image Editors

Sound Support in Object Mode

Chroma-Key Background Knockout

Transparency Stitch Viewer

Frame Based Animation

Centering, Cropping, and
De-Wobbling Effects

Unlimited Hot Spots in all Modes

Scene Module accepts Panoramas,
Objects, Still Images and Linear
Movies as Nodes

Built-In Support for Mechanized
Object Rigs

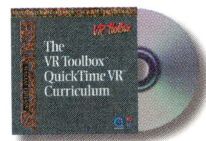
Edit and Preview Multi-Node Scenes
without rendering finished movie

Build Panos and Objects from
within the Scene Module

Educational QTVR Curriculum

Cross Platform Compatible

360°
times
THREE
to the power of
v2.0



...the World's greatest QTVR
feature/function set coupled with
the World's first QTVR curriculum.

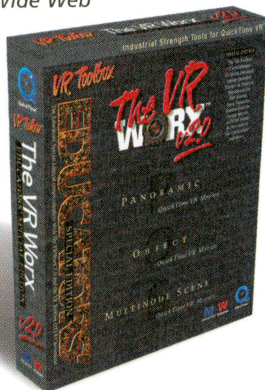
PANORAMA

OBJECT

SCENE

The VR Worx

Optimized for the
World Wide Web



all the QuickTime VR the World has to offer...

■ The New "Educator's Special Edition" from VR Toolbox™ delivers an unbeatable duo of Multimedia tools for the digital classroom of today...The VR Worx™ v2.0 and the VR Toolbox QTVR™ Curriculum. ■ The VR Toolbox QTVR Curriculum is a complete, easy to read, enjoyable course of study for QuickTime VR™. Written as a companion piece for The VR Worx, it comes complete on CD-Rom and includes both Teacher and Student Workbooks, Samples, Tutorials, Classroom Projects and an HTML Overview developed to guide you through the essential steps for generating all types of QTVR movies. ■ The VR Worx v2.0 is the upgrade to the Award-winning suite of QuickTime VR authoring tools from VR Toolbox. The VR Worx combines all our QTVR solutions into a single integrated interface, and creates the ideal tool suite for the Educator who needs all the QuickTime VR the World has to offer. The VR Worx gives you the ability to generate QTVR Panoramic movies, Object movies and Multi-node Scenes, also called Virtual Tours. ■ The VR Worx v2.0 is built upon QuickTime™ 4 and available for both Macintosh™ and Windows™. The New 2.0 upgrade brings you a feature/function set unparalleled to date...and coupled with the VR Toolbox QTVR Curriculum at no extra charge, the New "Educator's Special Edition" is the best buy in Multimedia today. ■ Visit our web site for full-featured demos of all the VR Toolbox products.

1-877-878-6657 TOLL FREE

www.vrtoolbox.com

Visit VR Toolbox at QuickTime Live!

October 9-12, 2000, in Beverly Hills.

VR Toolbox™
Industrial Strength
TOOLS for QuickTime VR™

Respecting Your Preferences, Controlling Your Keys, and Kidproofing Your Mac

Q My 18-month-old daughter often fondles my iMac. I would like to know if there is some way I can “freeze” my desktop so that when she touches the computer, she cannot make any destructive changes to anything.

— Isaac Lee

A There is a very simple solution to your problem, Isaac. A toddler frequently visits my home office and I have found the best way to stave off the wrath of his curiosity is to simply unplug the keyboard and mouse from the iMac. It may

By Chris McVeigh

seem somewhat cruel, I suppose,



but you can make it up to her by purchasing one of Humongous software's latest *Putt-Putt* adventures (www.humongous.com).

Q I have been using Internet Explorer 5 and Outlook Express

5.02 for about three months. As of last week, Internet Explorer will not open and gives me the following alert: “The application Internet Explorer has unexpectedly quit because an error of type 2 occurred.” I have reinstalled both software packages, increased the memory in both to 20MB, and got the same error. What am I missing?

— Ben White

A It sounds as though you have a problem with Internet Explorer's preferences. Internet Explorer's Preferences folder contains your bookmarks, a history of the most recent addresses you have visited, your color choice for the browser buttons, and pages you've added to your scrapbook. Although you may have reinstalled Internet Explorer 5, the preferences remained safe within the System Folder.

Occasionally, preference files can become corrupt. This can manifest itself as an immediate crash once the application in question is launched. The solution is often to simply toss out the offending preference file and relaunch the application. And that's just what you'll have to do to put Internet Explorer back on track. Dive into your System Folder and open the Preferences folder. Select List from the View menu to put the hordes of preferences files in alphabetical order. Locate the folder called Explorer, toss it in the trash, and relaunch the application. Everything should move along swimmingly now.

The caveat of tossing your preference folder, unfortunately, is that you

will lose all your bookmarks and scrapbook items. It's a small sacrifice, though, if it enables you to actually launch the application and browse the Web again!

Q I do not have the Function Key button in my Keyboard control panel! Apple's Help tells me that if it is not shown, my computer does not support this function. What gives? I have an older Power Macintosh G3 266 running Mac OS 9.0.4.

— Richard E. Berry

A Unfortunately, the keyboard Hot Keys feature is only available on newer Macintoshes with built-in USB. I cannot use the feature on my pre-USB PowerBook G3, for example. Should you decide you really need the functionality of Hot Keys, you can purchase CE Software's QuickKeys for \$49.

Q When I drag-and-drop an image file from Outlook Express to the desktop, I get a “picture clipping.” Opening the file just gives me a simple window containing the image with no printing options. How do I translate that into something I can print?

— Tina Santella

A Your problem stems from the method in which you are removing the image files from Outlook Express. As you have discovered, you can simply drag the image to the desktop. This creates a Mac OS picture clipping — an image file

that can be viewed only by double-clicking. Go back to Outlook Express and open a message containing an image. Now, look just above the message window (where you see the image) and below the address information. You'll see a small blue triangle pointing right, adjacent to the word "Attachment." Click once on the triangle to expand the Attachment box. Once it is open, you'll see the image file(s) listed. This is the file you need to copy to the desktop, rather than the actual image. You can now open the image with QuickTime's PictureViewer application and print it as you like.

Q I have an iMac and a PowerBook and I would like to use the File Synchronization control panel to synchronize my email on both machines. I am using Outlook Express 5, however, and I cannot locate the actual email file I need to select for synchronization.

— *Marcel Harrtstein*

A Outlook Express stores your email within its Identities folder. Root around and you'll find a folder called Main Identity (unless you've personalized it within Outlook Express). You must syn-

chronize this folder between your iMac and PowerBook in order to keep both machines up-to-date. Please be aware, however, that you're performing

a 'dumb' synchronization. Since the email is kept within a database file to reduce its size, you can only overwrite one database with the other. The File Synchronization control panel does not dig into each database and exchange all recent messages. Let's say you collect your email with your iMac and then later collect your email with the PowerBook without first synchronizing the two. New messages will

have been collected by both systems independently, but only one database file will prevail during the next synchronization.

Q I own an iMac DV and I've been having a problem with my display right after I boot up. About 30 seconds after the Finder launches, the color of the screen starts to darken. This continues until the color is so dark, I can hardly see the screen. I then launch the Monitors control panel, click on the Color button, and reselect the ColorSync profile for the iMac. Everything then returns to normal for a few minutes, and then the process repeats itself. I've talked to friends and some Apple technicians, and everyone is pretty sure that it must be a software problem, as it does eventually correct itself. Any ideas?

— *Chris Peters*

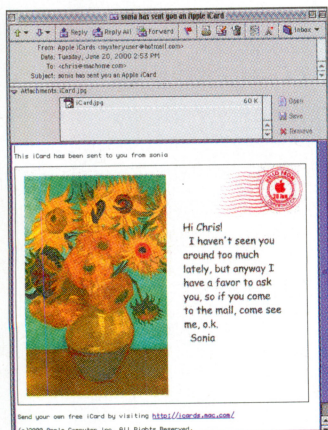
A I must dispute the notion that this is simple software problem. Color shifts and waning brightness in a display are often caused by a faulty analog board sending the signal to the cathode ray tube. The problem you describe appears

to be affecting the brightness of the display, and as you've noticed, it levels off after the computer has been on for a while. This is not symptomatic of a software problem. Problems with software typically result in applications automatically quitting, system crashes, and flashing folders at startup. Hardware problems are more insidious, sometimes totally debilitating the computer, and other times simply cropping up as odd intermittent behaviors. Call Apple Service at 800-500-7078 to arrange a service appointment for the computer. **MHJ**

have questions?

Got a Mac problem that's driving you nuts? Let us take a crack at it. We'll answer questions of general interest to all readers. All mail is assumed intended for publication, and we reserve the right to edit questions for brevity and clarity. When sending your questions, include your full name and phone number. Send your questions to:

questions@**machome.com**



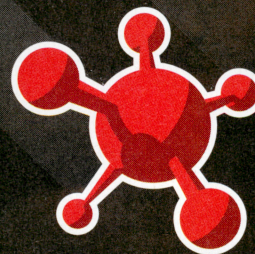
Tech Support The MacTank Way:

- We use humans.
- We use telephones.
- We use the Macintosh.

Why search the Web? Why wait on hold? Why wait for e-mail?

We don't care what caused the problem. We don't care how long it takes to solve the problem. All of our technical support operators are dedicated Macintosh professionals ready to help for only \$24.95.

Talk to real people and solve your problems. Now.



MACTANK
The Tech Support Alternative

877-MACTANK
(877) 622-8265

MAC OS X READY

Turn Your F Keys into Web Portals

Chances are, you use your Macintosh for browsing the Internet more than any other task. And like most people, you probably have a set of regular sites you visit for news, weather, and sports. Wouldn't it be great if you could visit any one of these Websites with a simple keystroke, no matter what application you are using? Owners of Macs with built-in USB can do just that by combining Mac OS 9's Internet clippings with their keyboard's Hot Keys. The first task is to create a folder on your desktop called "Destinations" (or something similar). Next, you'll need to launch Internet Explorer 5 and visit one of your favorite sites. Click once in the address field and press Command-A to select all. Now, drag the address from the Internet Explorer window and into the folder you just created on the desktop. You've now saved an Internet clipping file — double-click it at any time and it will bring you directly to that Website. Continue to visit your favorite sites, collecting up to 12 Internet clippings.

Once you're done, open the Keyboard control panel. At the base of the window you'll see a button called Function Keys. A new window will open, allowing you to assign a function to each F Key. Return to the desktop and open the folder where you stored the Internet clippings. Choose List from the View menu to tidy things up. Drag the window to the right of the display so it is not overlapping the Keyboard control panel. Now, drag-and-drop each clipping into the text boxes adjacent to the Function Key numbers. (Don't worry if you cannot remember exactly which key triggers which site just yet — you'll learn with time.) Once you've assigned a site to each key, move down to the box called "Function Key Settings." You must be sure this option remains unchecked. Otherwise, you will have to hold down the Option key to trigger the Hot Keys. Finally, click OK and return to the Finder.

It's time to give your new set-up a whirl. Let's say you want to visit "MacGame Files.com," and you've assigned that clipping to F4. All you need to do, then, is press F4 once. You can be composing email, editing an article, or even browsing the Net. Once you press F4, you will be instantly whisked away to that site. Internet Explorer will start up, a connection to the Internet will be initiated if required, and the site will appear in the Explorer window. Nothing is simpler. A word of caution: Be careful with your typing. Accidentally pressing an F Key will jet you off to the site, whether you want to or not. For this reason, it may be better to leave F11 and F12 unassigned, since they sit so close to the delete key on Apple's standard USB keyboard.

Quickly Access QuickTime Player

By Chris McVeigh

Have you ever downloaded a QuickTime movie,

MPEG clip, or MP3 file only to find that it appears on your desktop with a blank file icon? Double-clicking it brings up the dreaded dialog box that protests, "Could not find the application that created the document GoodMusic.mp3." You have to search through the listed applications to find QuickTime Player each and every time this happens. It's a tedious task, if nothing else. Thankfully, there's an easy work-around. Click open the Control Strip and look for the QuickTime module (it's the one with the blue QuickTime logo). The next time you come across a blank media file, simply drag it onto the QuickTime Control Strip module. QuickTime Player will automatically open and display the file.



Squeeze Your Icons Together

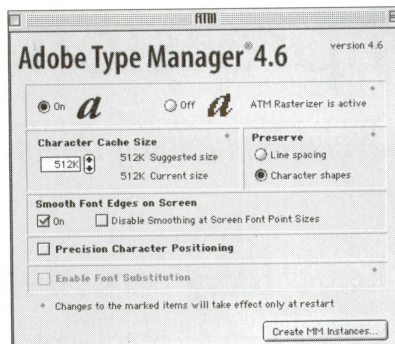
Do you find that the icons in the Finder are spaced a little too far apart? There's a simple way to view more icons at once. Choose Preferences... from the Finder's Edit menu. Click on the tabbed marked General, near the top. At the bottom of the window, you'll now see an option marked Grid Spacing. Simply click Tight to squeeze more items together. Unfortunately, this will only affect new folders as you create them. To clean up an existing folder you must open it, choose View Options from the View menu, and click the second option, "Always Snap to Grid." You can then either move the icons yourself or select Clean Up from the View menu to automatically rearrange the icons. Be careful, though — this option frequently makes more of a mess than it cleans up.

Got some tips you'd like to share with your fellow MacHome readers? Please send them to us at:
chris@machome.com

All mail is assumed intended for publication, and we reserve the right to edit tips for brevity and clarity. When sending your tips, please make sure to include your full name.

Smooth ALL Fonts on Screen

The font-smoothing option in the Appearance control panel neatly blurs the edges of many typefaces to make them clean and more readable. There's only one problem — the Mac OS's font-smoothing technology only smooths the edges of TrueType fonts. Now, if you just use the collection of typefaces that came included with your Macintosh or the ones that were installed with Microsoft Office, you're all set. However, if you're a font junkie, you probably have several PostScript fonts installed, too. How do you smooth these as well? The first thing you should do is head on over to Adobe's Website and download Adobe Type Manager Light 4.6 (www.adobe.com/products/atmlight/main.html). Once the product has downloaded, install it and restart your Macintosh. Launch the ATM control panel. Midway down, you'll notice a box with the words, "Smooth Font Edges on Screen." Simply check off the box marked On, and all PostScript fonts will then be smoothed.



Mac OS Update Watch

Please Note: From time to time, software updates go out of circulation, or their names will change, making them unavailable from the Websites listed below. If that happens, head over to MacUpdate (www.macupdate.com), a searchable site for updates.

iMovie 2.0.1

Apple has already released a software update for the just-announced iMovie 2. The update improves stability, enhances performances and rolls in support for the iMovie Plug-in Pack 2. The update is intended for the version of iMovie 2 that shipped with the most recently announced iMacs (it will not update iMovie 1.0). The software can be found at <http://asu.info.apple.com/swupdates.nsf/artnum/n11789>.

AirPort 1.2

This latest update to Apple's wireless networking software improves performance and increases stability. The software now supports closed networks, meaning that

someone with a nearby AirPort-enabled Macintosh cannot locate or log into your network without knowing the exact server name. The update can be found at <http://asu.info.apple.com/swupdates.nsf/artnum/n11570>.

USB Printer Sharing

Apple has released USB Printer Sharing software to allow Macintosh users to share USB printers over both Ethernet and AirPort networks. The update requires Mac OS 9 and can be found at <http://asu.info.apple.com/swupdates.nsf/artnum/n11728>.

AppleWorks 6.0.4 Updater

This latest update to Apple's multifaceted software suite improves performance and increases stability. Several bugs have been addressed, including an issue with AppleWorks 6.0.3 and Dataviz translators. The update can be downloaded from <http://asu.info.apple.com/swupdates.nsf/artnum/n11721>.

Get away from the office without missing a beat.



FireWire 250MB Zip® Drive



USB/FireWire Combo Drive



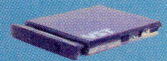
Tri-Media Reader



PowerBook peripherals



FireWire UltraThin Hard Drive



FireWire USB CD-R/W Drive



With VST's line of portable FireWire, USB and laptop peripherals, you can go anywhere without missing a beat.

So visit www.vsttech.com to learn more about these and other exciting products designed to help simplify your portable computing experience.



Omega, the Omega logo, Zip are trademarks of Omega Corporation. All other trademarks are property of other respective holders. Omega patents protected by patent applications pending in the US and other countries. Apple, Macintosh, the Mac OS logo, PowerBook, and iBook are registered trademarks of Apple Computer, Inc. SuperDisk is a trademark of Imation Corporation.

www.vsttech.com

Digital Compression

Minimizing Media File Sizes While Maintaining Quality

Software engineers have long wrestled to minimize the size of digital media files. The raw digital format of full-color images, video clips, and audio snippets are often so large that transferring them between computers is cumbersome and impractical. In an effort to enhance the portability of media files, several compression technologies were developed.

Image Compression

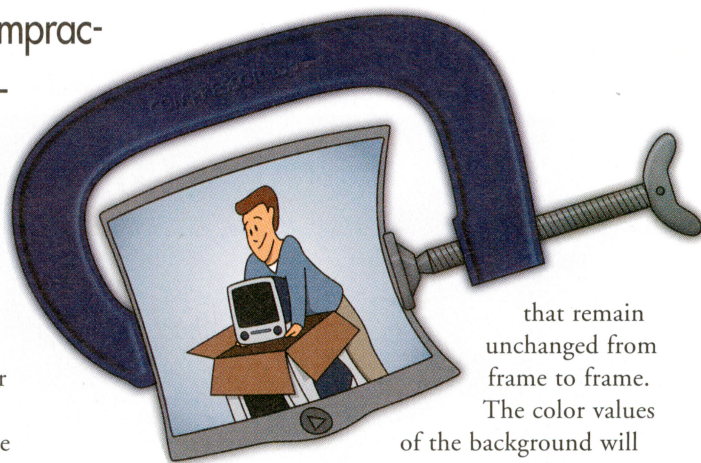
A picture compressor seeks out and notes repeating blocks of color. The compressor might also swap a smaller value for an oft-repeated color. The value of a color is represented by 24 bits — say, 011011100011010101011011. To reduce the size of the file, the compressor may abbreviate repeating colors with just eight or 16 bits. Unlike text files and software archives, image compression doesn't need to be 100% accurate. To reduce

By Chris McVeigh

the size of an image file, the compressor may approximate neighboring colors. For example, a single pixel might be a specific value of blue. Its eight neighbors, meanwhile, may be very similar in color but carry a different color value. If the variance of the color falls within an acceptable level, the compressor notes the entire block of pixels as the same color. In your online surfing, you've probably seen images with unnatural blocks of solid color. This is because the image has been compressed with a low-image-quality setting.

Video Compression

Digital video compression works a lot like image compression. The biggest difference is that a video compressor looks for graphic similarities from frame to frame. Let's consider a video clip of a person being interviewed. The principal motion will come from the person's head and face. The background, meanwhile, should remain constant. A video compressor notes the elements of the background

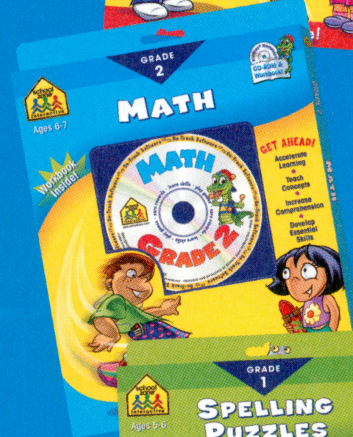


that remain unchanged from frame to frame. The color values of the background will be noted in a periodic key frame. The key frame determines repeated colors over the subsequent set of frames, so that the data doesn't need to be stored for each and every frame.

Audio Compression

Audio compression works a bit differently. One of the easiest ways to compress audio is by removing an entire piece of digital information at a regular, repeating interval. This is what happens when an audio file is decreased from 44KHz to 22KHz — every second block of audio information is removed. Audio can also be compressed by reducing the number of bits that represent a single value of audio. High-quality audio is usually represented by 16 bits of information per block. The compressor can reduce the size of the file by selecting the best eight bits to represent that 16-bit block. Both of these methods result in an observable decrease in the quality of audio, however. New audio compression techniques such as MP3 use compression algorithms to reduce the size of the file through analysis and notation of similar, repeating blocks of audio. The result is a small file that retains much of the quality of the original. **MHJ**

Workbooks with as much energy...
as your kids!



Electronic Workbooks!

This new evolution of workbooks provides a simple, fresh, one-of-a-kind educational tool for parents, teachers and children. Kids will love the fun activities and exciting arcade games as they improve their skills. Based on the famous School Zone workbook line, On-Track Software brings proven content to the computer.

Visit us at www.schoolzone.com or call 1-800-253-0564.



Advertiser	Phone	Technical Support	URL	Pg. #
4x6.com	888-404-4by6	n/a	www.4x6.com	78
Apple Computer Corp.	800-795-1000	800-SOS-APPLE	www.apple.com	IFC-1
ARS Nova	206-889-0927	206-889-0927	www.ars-nova.com	94
ASD Software	909-624-2594	909-624-2594	www.asdsoft.com	93
Aspyr Media	888-21ASPYR	512-708-8100	www.aspyr.com	57
Aspyr Media	888-21ASPYR	512-708-8100	www.aspyr.com	67
Bell Stor	800-800-1513	800-800-1513	www.bellstor.com	85
BodyBilt Seating	800-364-5673	N/A	www.bodybilt.com	31
Camera Zone	888-840-51500	888-840-51500	www.thecamerazone.com	86
Canon	800-OK-CANON	800-OK-CANON	www.powershot.com	23
Canon Computer Systems	800-OK-Canon	800-OK-Canon	www.ccsi.canon.com/macfriendly	2-3
CE Software	800-523-7638	N/A	www.quickkeys.com	88
CH Products	N/A	N/A	www.chproducts.com	89
Club Mac	800-260-8549	800-260-8549	www.clubmac.com	79-81
Coast to Coast Memory	800-4-MEMORY	800-4-MEMORY	www.18004memory.com	93
Contour Design	800-462-6678	800-462-6678	www.contourdesign.com	87
Deneba Software	305-596-5644	305-596-5644	www.deneba.com	88
Dr. Bott	503-452-8101	503-452-8101	www.drbott.com	90
Epson	800-GoEpson	340-782-2600	www.epson.com	18-19
Farallon	510-346-8001	510-346-8001	www.farallon.com	89
Gathering of Developers	877-GODGAMES	214-880-0001	www.godgames.com	BC
Griffin Technologies	615-255-0990	615-255-0990	www.griffintechology.com	95
IBM / Via Voice	N/A	919-517-0222	www.4.ibm.com/software/speech/mac	11
IXLA	800-881-2966	N/A	www.ixla.com	25
Kensington	650-572-2700	650-572-2700	www.kensington.com	17
Kusuma	877.3.KUSUMA	877.3.KUSUMA	www.kusuma.com	90
Leister Productions	717-697-1378	717-697-1378	www.leisterpro.com	94
LexMark	N/A	N/A	www.lexmark.com/us_home.html	45
Lind Electronics	800-697-3702	800-697-3702	www.lindelectronics.com	90
MacAlley	800-644-1132	800-644-1132	www.macally.com	95
MacMall	800-579-0698	800-579-0698	www.macmall.com	82-83
MacTank	877-MACTANK	877-MACTANK	www.mactank.com	73
MacSolutions	800-873-3RAM	800-873-3RAM	www.macsolutions.com	93
MGE UPS Systems	N/A	N/A	www.mgeups.com/mac	92
Micromat	800-829-6227	707-837-8012	www.micromat.com	IBC

Advertiser	Phone	Technical Support	URL	Pg. #
Microsoft	N/A	N/A	www.microsoft.com/mac	8-9
Momentum Software	877-381-1400	877-381-1400	www.momentumus.com	92
MYOB	800-322-6962	800-322-6962	www.getmyjob.com	84
OakTree Software	407-339-5855	407-339-5855	www.oaksoft.com	94
Power ON	800-344-9160	612-317-0344	www.poweronsw.com	7
Ricoh	888-742-6410	888-742-6410	www.ricohcpg.com	37
SmartInput	800-366-8323	800-366-8323	www.smartinput.com	92
SRS Labs	800-243-2733	949-442-1070	www.srslabs.com	47
Staz	800-348-2623	800-348-2623	www.stazsoftware.com	90
Strider Software	906-863-7798	906-863-7798	www.typestyler.com	89
TechWorks	800-688-7466	800-688-7466	www.techworks.com	35
Top Choice Digital Camera	800-752-3935	800-752-3935	www.topchoicedigital.com	91
Thursby	817-478-5070	817-478-5070	www.thursby.com	41
VST	978-635-8200	978-635-8282	www.vsttech.com	75
Zoom	800-631-3116	800-631-3116	www.zoom.com	92




custom cards
500 business cards \$85
500 postcards \$99
 4/1 = full color front : b&w back

www.4by6.com

photography : gregory cowley

FASTER • EASIER • LIMITLESS



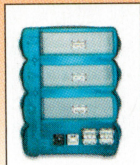
BusStation 7-Port Hub



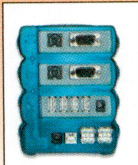
Front View

BusStation™

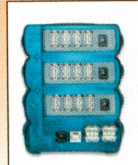
- Create your own laptop docking station or multi-function USB hub
- Connect up to 7 USB devices, or expand your BusStation™ with a wide variety of expansion modules
- Plug-and-Play installation and easy to use. Simply snap and unsnap modules without rebooting your computer
- Available modules include more USB ports, serial ports, SCSI, ADB, ports and more

The possibilities are endless...

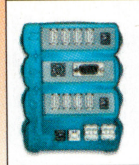
■ Seven port hub
(standard configuration)



■ Two serial and
eight USB
ports



■ Sixteen
USB ports



■ One serial
and twelve
USB ports



■ One SCSI,
one serial and
five USB ports



■ One SCSI,
two serial and
four USB ports

**Available in a variety of colors
to coordinate with your
workstation.**



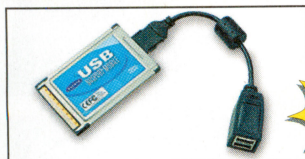
Graphite
F5U100-SLV



Blueberry
F5U100-BLU



Tangerine
F5U100-ORG

**USB BusPort™ Mobile**

Add USB capabilities to your notebook PC or Macintosh® PowerBook® quickly and easily.

B011 1815 F5U022 \$99.95

**USB Parallel Printer Adapter for Mac™**

Connect a Parallel Printer to your Macintosh® computer.

B011 1805 F5U002-BLU \$49.95

**USB SCSI Adapter for Macintosh™**

Connect SCSI devices through USB

B011 1811 F5U115-UNV \$89.95

**USB 4-Port Hub for Macintosh™**

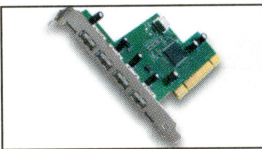
Connect up to 4 USB devices to a Macintosh® USB port - can be stacked to connect up to 127 devices.

B011 1670 F5U101-MAC \$59.95

USB 4-Port Hub for Macintosh™

Connect up to 4 USB devices to a Macintosh® USB port - can be stacked to connect up to 127 devices.

B011 1670 F5U101-MAC \$59.95

**USB 4-Port PCI Card**

4-Port PCI Card with QuadraBus technology. Add 4 12Mbps USB ports to your computer.

B011 1717 F5U006-UNV \$58.95

Part Number	Model	Description	Price
B011 1800	F5U100	USB BusStation™	\$99.95
B011 1800	F5U100-SLV	USB BusStation™, Graphite	\$99.95
B011 1800	F5U100-BLU	USB BusStation™, Blueberry	\$99.95
B011 1800	F5U100-ORG	USB BusStation™, Tangerine	\$99.95
B011 1670	F5U101-MAC	USB 4 Port Hub for Macintosh®	\$59.95
B011 1812	F5U103-MAC	USB Serial Adapter for Macintosh®	\$59.95
B011 1805	F5U002-BLU	USB Parallel Printer Adapter for Mac®	\$49.95
B011 1102	F5U005-MAC	USB BusPort™ for Macintosh®	\$49.95
B011 1502	F5U010-MAC	USB 7 Port Hub for Macintosh	\$79.95
B011 1678	F5U015-TPW	USB SCSI Adapter with Termpower	\$99.95
B011 1327	F5U206-MAC	USB VideoBus™ for Macintosh®	Now! \$84.99*
B011 1616	F3U133-06-GLD	Gold Series USB Device Cable A Plug/B Plug	\$24.99
B011 1288	F3U133-10-GLD	Gold Series USB Device Cable A Plug/B Plug	\$29.99
B011 1294	F3U133-06	USB Device Cable A Plug/B Plug	\$10.99
B011 1288	F3U133-10	USB Device Cable A Plug/B Plug	\$12.99
B011 1617	F3U134-06	Pro Series USB Extension Cable A Plug/A Plug	\$19.99
B011 1292	F3U134-10	Pro Series USB Extension Cable A Plug/A Plug	\$24.99
B011 1297	F3U001	Pro Series USB Motherboard Cable	\$12.99
B011 1790	F5U118-UNV	USB ADB Adapter	\$49.95
B011 1811	F5U115-UNV	USB SCSI Adapter with Termpower	\$89.95
B011 1815	F5U022	USB BusPort™ Mobile	\$99.95
B011 1717	F5U006-UNV	USB 4-Port PCI Card	\$58.95
B011 1850	F5U109	USB PDA Adapter	\$39.99

**USB Serial Adapter for Macintosh™**

Connect any serial device to a Macintosh® computer's USB port - stackable and perfect for digital cameras and PDAs!

B011 1812 F5U103-MAC \$59.95

64023
SOURCE CODE

ClubMac®

ORDER TODAY!

1-800-260-5109

ORDER ON-LINE

www.clubmac.com

Sales & Customer Service

24 Hours a Day, 7 Days a Week.....(800) 260-5109

Inquiries & International Sales

24 Hours a Day, 7 Days a Week.....(949) 768-8130

24-Hour Fax.....(949) 768-9354

Corporate/Educational Sales

M - F 6am - 6pm PST..(800) 258-2621

Technical Support

M - F 6am - 6pm PST..(800) 854-6227

E-Mail:

ClubMac Sales...cmsales@clubmac.com

Customer Service...custsvc@clubmac.com

Technical Support...techsup@clubmac.com

ClubMac...7 Hammond, Irvine, CA 92618

Mail:

NO SURCHARGE



ClubMac®

NEW INNOVATIVE DESIGN! NEW DUAL PROCESSORS!

INTRODUCING
the **G4**
Cube!



Only
8" x 8"

- 450MHz PowerPc G4
- New Optical Mouse
- New Keyboard
- 1MB L2 Cache
- 64MB SDRAM (Expandable to 1.5GB)
- 20GB Ultra ATA drive
- DVD-ROM w/DVD-Video
- RAGE 128 Pro graphics
- 10/100BASE-T Ethernet
- 56K internal modem

Includes
iMovie 2

***Call for
Best Price!**

450Mhz

A102 1828 450MHz/64MB RAM/20GB HD/RAGE 128/10-100BASE-T Ethernet/56k modem

Suggested
Retail Price
\$1795*

POWERMACS!

- New Optical Mouse!
- New Keyboard!
- 10/100/1000 Ethernet!
- Includes iMovie!

**Now Up to Dual
500Mhz!**



Includes
iMovie 2

***Call for
Best Price!**

4.9%
Financing Available
from American Express
Equipment Financing

Suggested
Retail Price
\$1595*

400Mhz

A102 1829 400MHz/64MB RAM/20GB HD/DVD-ROM/RAGE 128 Pro/Gig-Ethernet/56k modem

450MhzMP

A102 1830 Dual 450MHz/128MB RAM/30GB HD/DVD-ROM/RAGE 128 Pro/Gig-Ethernet/56k modem

\$2495*

500MhzMP

A102 1831 Dual 500MHz/256MB RAM/40GB HD/DVD-ROM/RAGE 128 Pro/Gig-Ethernet/56k modem

\$3495*

PRINTERS

EPSON Stylus 740i
\$99



E040 1070

EPSON Stylus 1270
6 Color Photo Printer
\$499



E047 1084

hp HEWLETT PACKARD Deskjet 932C
\$199⁹⁹



H047 1203



MONITORS

SONY



E400 19" FLAT CRT
\$539
~~\$106 1113~~

- 19" FD Trinitron Display (18" visible)
- .24mm-.25mm var. AGP
- Max Res.1800x1440@60Hz

Apple® Studio Display
\$499
~~\$106 1405~~



- 17" Diamondtron CRT (16" visible)
- .25 Dot Pitch
- Max Res.1600x1200@85Hz

NEC/MITSUBISHI
NEC-MITSUBISHI ELECTRONICS DISPLAY



2040u 22" FLAT CRT
\$1129
~~\$1246 1059~~

- 22" Natural Flat CRT (20" visible)
- .24mm AGP
- Max Res. 2048x1536@75Hz

NEC/MITSUBISHI
NEC-MITSUBISHI ELECTRONICS DISPLAY



FE700 17" FLAT CRT
\$289
~~\$1026 1101~~

- 17" Flat CRT (16" visible)
- .25 AGP
- Max Res.1280x1024@66Hz

STORAGE

Quantum FireBall LM Series IDE

30GB
\$179



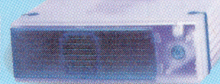
ClubMac DVD RAM Drive
\$399
C104 1714



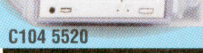
ClubMac SCSI 8x4x24x CDRW
\$299
C104 4027



ClubMac 75GB FireWire Drive
\$699
C104 5109



ClubMac FireWire 8x4x32x CDRW
\$319



ClubMac DDS-3 DAT 12-24GB
\$735
C104 1304



ClubMac DLT 4000 40GB
\$1499
C014 0200



ZIP 250 USB DRIVE
\$168⁹⁵
1044 1041



**CALL 1-800-217-9208
FOR A FREE CATALOG**

WARRANTIES: All items manufactured by ClubMac are returned to ClubMac for warranty repair. All other items carry manufacturer's warranty. MONEY BACK GUARANTEE: All products manufactured by ClubMac carry a 30 day money back guarantee. ClubMac extends all other manufacturers' return policies to its customers. Non-ClubMac products carry 30 day money back guarantee when specified. RETURNS: Call for RMA number! Any product that is returned WITHOUT an RMA number will be refused. ALL PRODUCT INFORMATION AND PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE. NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.

FIVE LUSCIOUS COLORS! Now Up to 500MHz!



Announcing New! iMacs

FOUR FRIENDLY MODELS.

FIVE LUSCIOUS COLORS.

Indigo iMac™ 350Mhz!



New!
\$795
Suggested
Retail Price

- PowerPC G3 350MHz Processor
- 7GB Ultra ATA Drive
- 64MB SDRAM
- ATI Rage 128 Pro
- 2 USB Ports
- Built-in 15" Monitor (13.8" viewable)
- 24X CD-ROM
- 10/100Base-T Ethernet
- Mac OS Pre-Installed
- 56K Internal Modem

All 4 Models Come With New Optical Mouse & New Extended Keyboard Design

iMac™ DV+ 450Mhz!



New!
SAGE
A102 1825
\$1295
Suggested
Retail Price
Includes
iMovie 2
CALL FOR
BEST PRICE!!!

- PowerPC G3 450MHz Processor
- 20GB Ultra ATA Drive
- 64MB of SDRAM
- DVD-ROM
- ATI Rage 128 Pro
- 10/100Base-T
- Built-in 15" Monitor (13.8" viewable)
- 56K Internal Modem
- 2 FireWire Ports
- 2 USB Ports
- VGA Video Mirroring

iMac™ DV 400Mhz!



New!
\$995

Includes
iMovie 2

- PowerPC G3 400MHz Processor
- 10GB Ultra ATA Drive
- 64MB SDRAM
- 24X CD-ROM
- ATI Rage 128 Pro graphics
- Built-in 15" Monitor (13.8" viewable)
- 56K Internal Modem
- 2 FireWire Ports
- 2 USB Ports
- VGA Video Mirroring

iMac™ DV_{SE} 500Mhz!



New!
\$1495

Includes
iMovie 2

Suggested
Retail Price

CALL FOR
BEST PRICE!!!

- PowerPC G3 500MHz Processor
- 30GB Ultra ATA Drive
- 128MB SDRAM
- DVD-ROM
- ATI Rage 128 Pro
- 10/100Base-T
- Built-in 15" Monitor (13.8" viewable)
- 56K Internal Modem
- 2 FireWire Ports
- 2 USB Ports
- VGA Video Mirroring

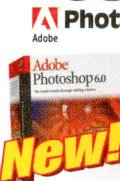
HOT! SOFTWARE - COOL PRICES!



Diablo II
\$59.95
H029 1007



FileMaker Pro 5.0
Upgrade
\$138.95
F219 1022



Adobe Photoshop v6.0
Upgrade
only!
\$189.95
A030 1406



IBM ViaVoice
Enhanced Edition
\$129.95
I019 1035

ADOBE SPECIALS! Save \$200

Adobe® Systems, Inc. and ClubMac bring you...
LiveMotion Summer Promotion!
Get LiveMotion for only \$99*

*When Purchased with Photoshop, Illustrator, or GoLive.
Hurry! Offer Ends 8/31/00



QUARK XPress 4.1
As Low As \$297
Q069 1017
*Competitive upgrade for Adobe Pagemaker users only.
You must have a valid Pagemaker serial number.



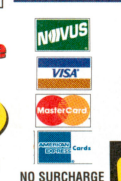
SYMANTEC Norton Utilities 5.0
#1 Problem Solver!
Upgrade
\$48.95
S219 1194
Full Version Only \$94.95
S219 1190



Virtual PC 3.0
w/ Win 98
Windows 2000 and Linux version now available!
\$179.95
C149 1055



Adobe Illustrator 9.0
Upgrade
only!
\$139.95
A030 1353



ClubMac®
SOURCE CODE 64100
ORDER TODAY! 24 HOURS A DAY
7 DAYS A WEEK
1-800-217-9208
ORDER ON-LINE
WWW.CLUBMAC.COM

Sales
24 Hours a Day, 7 Days a Week... (800) 217-9208
Customer Service
M-F 6am-7pm, Sat. 8-12 Noon PST (800) 551-6398
Inquiries & International Sales
24 Hours a Day, 7 Days a Week... (949) 768-8130

24-Hour Fax... (949) 768-9354
Corporate/Educational Sales
M - F 6am - 6pm PST (800) 258-2621
Technical Support
M - F 6am - 6pm PST (800) 854-6227

E-Mail: ClubMac Sales...csmals@clubmac.com
Customer Service...custsvc@clubmac.com
Technical Support...techsup@clubmac.com
Mail: ClubMac...7 Hammond, Irvine, CA 92618

MacMall

Call for your copy of the latest Mac
Software & Accessories Buyers Guide!
Featuring all the new releases from Macworld 2000,
New York. Call 1-888-579-0698



Everything and Anything
for Your Mac and More!

MacMall EZ Payment Plan!

NEW! Payment terms up to 48 months!

Now you can have low fixed monthly payments on consumer purchases of \$750 or more with the MacMall EZ Payment Plan. It's fast and easy to apply for, and there are no application fees or prepayment fees. Call your Account Executive today, or apply online! You can complete your purchase in just minutes—and have your order tomorrow!

Financing available on approved credit arranged through MBNA America Bank, N.A. Payment does not include shipping charges and sales taxes if applicable. Estimated monthly payment is based on approximate 48-month term at an Annual Percentage Rate (APR) of 14.99%. Your APR may be higher. There are no transaction fees for MacMall purchases billed directly to your account. There is a transaction fee of 3% of the U.S. Dollar amount of each advance check you write (\$5 min/\$30 max), but there is no obligation to use advance checks.

GREAT ADD-ONS!

DCR-TRV20 Digital Camcorder

Call for latest pricing!

only
\$1,699 #80282



Imation

SuperDisk Drive

Reads and writes both 120MB
SuperDisks & standard 3.5" diskettes.

\$99⁹⁹
now only #46876
Reflects \$20 mail-in rebate. Ends 9/30/00.

HP DeskJet 935C Color Printer

• 9ppm black; 7.5ppm color

only
\$199⁹⁹ #59288



Astra 2200 USB and SCSI Scanner

only
\$149⁹⁹ #82973

After \$30 mfr. mail-in rebate w/purchase of CPU. Key. price \$179.99. While supplies last!

CoolPix 990 Digital Camera

• 3.34 Megapixel CCD
• One year warranty • USB

only
\$979⁹⁹ #57105
While supplies last!



OLYMPUS

Olympus D-360L Digital Camera

• 1280 x 960 res. • 1.8" LCD
• 8MB SmartMedia

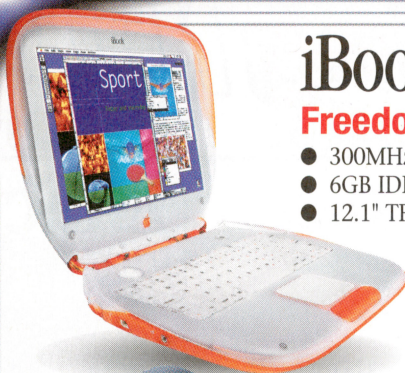
only
\$299⁹⁹ #57140
While supplies last!



iBook—the iMac to Go!

Freedom of movement!

- 300MHz PowerPC G3 processor
- 64MB of SDRAM
- 6GB IDE hard disk
- 24X CD-ROM
- 12.1" TFT active-matrix display
- 10/100Base-T Ethernet



300MHz
iBook **only** **\$1,594** #56184 (Blueberry)
#56183 (Tangerine)
or as low as **\$45/month** with the
New MacMall EZ Payment Plan!



With up to 6 hours
between recharges,
the iBook is perfect
for a full day on the
road or in the office.

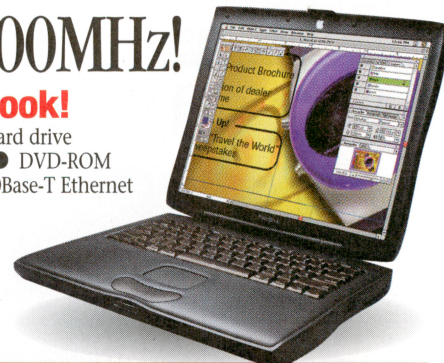
366MHz
Special Edition
Graphite iBook **only** **\$1,794** #56176
or as low as **\$50/month** with the
New MacMall EZ Payment Plan!

PowerBooks up to 500MHz!

Fastest performance in a notebook!

- 400 or 500MHz PowerPC G3 processor
- 6 or 12GB hard drive
- 64 or 128MB RAM
- Hot-swappable expansion bay
- DVD-ROM
- 14.1" TFT XGA active matrix display
- Built-in 10/100Base-T Ethernet

PowerBook
G3 Series **starting at** **\$2,494** #56143
or as low as **\$70/month** with the
New MacMall EZ Payment Plan!



Order	MHz	RAM	HD	Cache	Drive	Modem	Display	Price	or as low as
#56143	400	64MB	6GB	1MB	DVD-ROM	56K	14.1" Active Matrix	\$2,494	\$70/mo*
#56144	500	128MB	12GB	1MB	DVD-ROM	56K	14.1" Active Matrix	\$3,494	\$98/mo*

*With the new MacMall EZ Payment Plan.

Hot Software Deals from MacMall!

Intuit
Quicken Deluxe 2001
only
\$39⁹⁵
#849561
After \$20 mfr. mail-in upgrade rebate.

Diablo II
Call MacMall for the hottest Mac games!
only
\$54⁹⁹
#951075

Photoshop 6.0 Upgrade
New!
only
\$189⁹⁹
#951597

Microsoft
FREE Upgrade to Office 2001
when you buy Office 98 today!
only
\$249⁹⁹ #26155



MacMall Exclusive! The MacMall Super Bundle!

Complete your system and save on these name brand peripherals when you purchase any new Mac. Supplies are limited so order today! Includes:

- Lexmark Z22 printer
- Umax Astra 2000U Scanner
- Aladdin IntelliNews
- Micro Connector USB 4-Port Hub
- Belkin USB Printer Cable
- PhotoDisc® Starter Kit

all for
only
\$99⁹⁹*
#950856

Prices and specifications subject to change without notice. We are not responsible for any typographical, photographic or technical errors. Note: Products and packaging depicted may differ from stock available at time of shipment; we reserve the right to substitute equivalent items. All offers expire 10/15/00 unless otherwise noted or while supplies last.

Order Any Item in 4 Easy Steps

1. Go to www.macmall.com
2. Click on "Shopping Cart"
3. Enter part# in "Catalog Express"
4. Click on "Proceed to Checkout"

CATALOG EXPRESS

macmall.com 1-888-579-0698

New iMac DV+!



In Ruby, Indigo and Sage!

Slip the latest DVD title into the slot-loading drive and watch it on the brilliant 15" built-in display. The new Theater Mode makes your viewing experience positively cinematic!

- 450 MHz G3 PowerPC processor
- 64MB SDRAM
- 20GB hard disk
- Apple Pro Keyboard and Pro mouse

450MHz iMac DV+

\$1,294 #951060 (Indigo)
#951064 (Sage)
#951062 (Ruby)

or as low as **\$37/month** with the **New MacMall EZ Payment Plan!**

64MB RAM; 20GB Hard Drive; 4X DVD-ROM Drive; 56K modem



350MHz iMac

\$799

only #951155 (Indigo only)
or as low as

\$23/month with the **New MacMall EZ Payment Plan!**

64MB RAM; 7GB Hard Drive; 24X CD-ROM Drive; 56K modem

New! Power Mac G4 Cube!

Ultra small and silent!

At less than one quarter the size of most PC's, the Power Mac G4 Cube delivers awesome performance.

- 450MHz PowerPC G4 processor
- 64MB of high-performance memory
- 20GB Ultra ATA/66 hard disk drive
- DVD-ROM drive
- Apple Pro Keyboard and Pro Mouse

New Apple® Power Mac G4 Cube



All new Macs come standard with the Apple® Pro Optical Mouse and the Apple® Pro Keyboard.



New! The Fastest iMac Ever!

The NEW iMac DV Special Edition!

This is the iMac for those looking for even more!

- 500MHz G3 PowerPC processor
- 128MB SDRAM; support up to 1GB
- 30GB Ultra ATA Hard Drive

500MHz iMac DV SE

\$1,494

only #951063 (Graphite) #950988 (Snow)

or as low as **\$42/month** with the **New MacMall EZ Payment Plan!**

128MB RAM; 30GB Hard Drive; 4X DVD-ROM Drive; 56K modem



New 17" Apple Flat Screen Studio Display

only **\$499** #951071

New Apple 15" Flat Panel Studio Display

only **\$999** #950991



New! Apple Power Macs with Dual Processors!

The Power Mac G4 is available with single or dual processors, with speeds up to 500MHz!

- 400MHz (single) or 450-500 MHz dual PowerPC G4 processor(s)
- 64, 128 or 256MB of SDRAM
- 10/100/1000Base-T Ethernet
- 20, 30 or 40GB hard drive
- DVD-ROM drive or DVD-RAM drive

Order	MHz	RAM	HD	DVD	Modem	Networking	Price	or as low as
#951068	(1)400	64MB	20GB	ROM	56K	Gigabit Ethernet	\$1,594	\$45/mo*
#950986	(2)450	128MB	30GB	ROM	56K	Gigabit Ethernet	\$2,494	\$70/mo*
#951067	(2)500	256MB	40GB	RAM	56K	Gigabit Ethernet	\$3,494	\$98/mo*

*With the new MacMall EZ Payment Plan.

Order Any Time! Open 24 Hours! Order Today by 10pm EST—Get it Tomorrow by 10:30am!

macmall.com 1-888-579-0698

AOL Keyword: MacMall **Mention your Priority Code: #ZMHMOA1**

MacMall

Small Business. Smart Solutions.SM

MYOB[®]

Looking for the ideal accounting software solution for your small business?



Then take a look at MYOB Accounting Plus.[™] Easy to use, Accounting Plus offers **power** and **flexibility** in a full-featured business management solution. The set-up wizard and

100 business templates let you **MacUser** get started quickly, and its award winning design lets you customize **★★★★½** Accounting Plus for your business. You can produce all the financial and management **reports** you or your accountant will ever need. **And**, with features like **Multi-Currency** you can sell to your foreign customers in their currency and automatically keep up-to-the-minute P&L and Balance Sheet in U.S. Dollars.

Professional Time Billing will track your **★★★★** work in progress, bill your clients in 1, 6, 10, 15, or 30 minute **MacHome** units or in hours.

OfficeLink allows you to import and export to Microsoft Excel, Microsoft Word and Corel WordPerfect, showing you live spreadsheets... with one click!

Super Security lets you lock away your personal info while allowing others to use all the features they need to.

MYOB has been there from the get go... **MACnificent** continually supporting small businesses using Macintosh since 1989. Check out all the award winning features at:



www.myob.com/us/mh

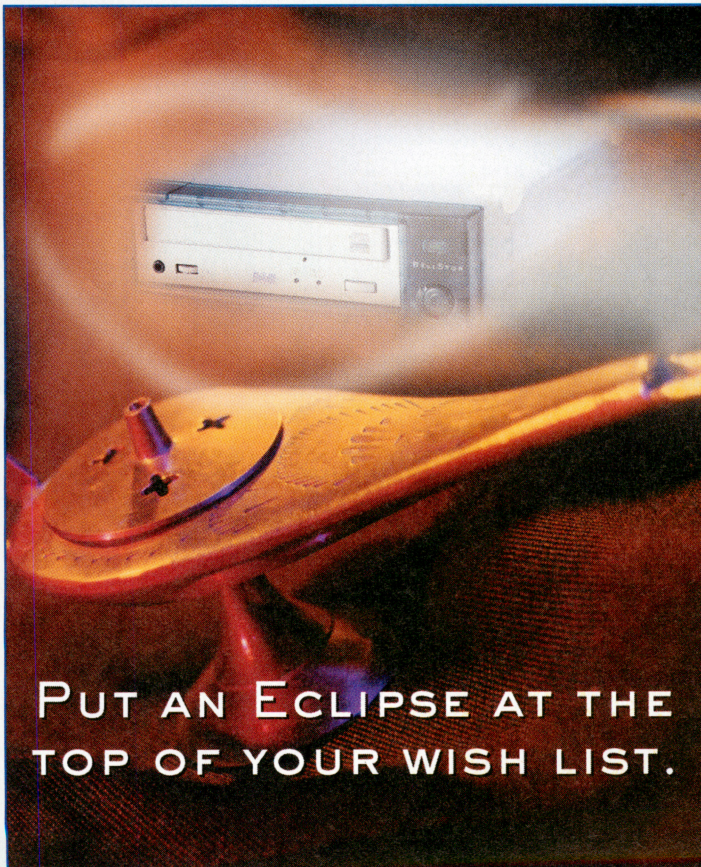
or call us at: **800-322-6962 (MYOB)**



Mac

Welcome to the Apple Developer Showcase

MacHome magazine, in conjunction with the **Apple Developer Connection**, built this **NEW** specialized advertising section to keep you, our valued reader, apprised of some of the hottest products available for your Mac. Due to the unparalleled popularity of Apple computer systems like the **Mac, PowerBook G3 and PowerMac G4**, more than ever before developers are releasing new Mac-compatible software and hardware products. Be sure to check this section each month where you'll find a wide variety of innovative solutions that will make your Macintosh experience even more pleasurable!



ECLIPSE FROM BELLSTOR, the first simple high-performance storage solution. Featuring the high speed FireWire interface, the BellStor Eclipse is available in Hard Disk, Tape and CD-RW models.

- Data transfer rates up to 400 Mbps
- Simple Plug & Play installation
- Hot-Pluggable
- Auto-configuring
- No device ID's or termination

"...if you're craving a FireWire CD-RW drive, put this one at the top of your list."

BUZ ZOLLER
Mac Addict, July 2000

BELLSTOR
SIMPLIFYING STORAGE SOLUTIONS

www.bellstor.com • (800) 800-1513

PUT AN ECLIPSE AT THE
TOP OF YOUR WISH LIST.

optical
technology
No mouse ball!

USB Overdrive
Software Included

Contour MiniPRO *Mouse*



pack n' go
carrying case™

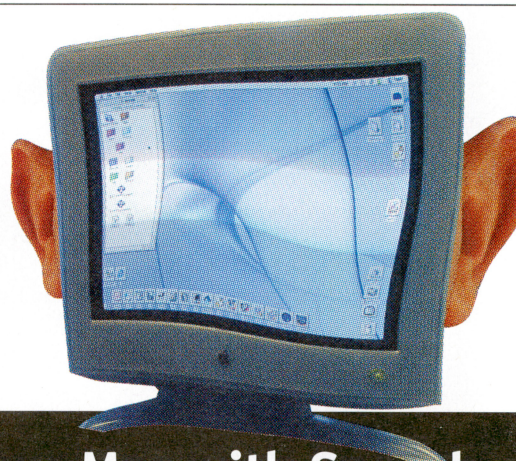
- Stylish compact design is ideal for laptop users on the go. Use it anywhere on any surface
- Utilizes the latest Optical Technology.
- Optimally designed to be comfortable, yet compact
- Unique pack n' go carrying case provides added protection and easy cord storage
- USB Overdrive software allows Mac users to program the secondary button to perform scrolling, contextual menus, double click, etc
- Interchangeable clip-on buttons

Please visit
www.contourdesign.com
for more details

All trademarks and registered trademarks are the property of their respective owners.

Developer Showcase

You talkin' to me?



QuicKeys 5.0

Control your Mac with Speech



- ▶ Mac OS9 multi-user support
- ▶ Voice activated shortcuts
- ▶ Record and Playback Sequences
- ▶ Powerful Custom Toolbars
- ▶ Plus much, much more

www.quickeys.com

1-800-523-7638 Mention K2347

© 2000 CE Software, Inc. QuicKeys is a registered trademark of CE Software, Inc. 06/00

Illustration never looked so good.

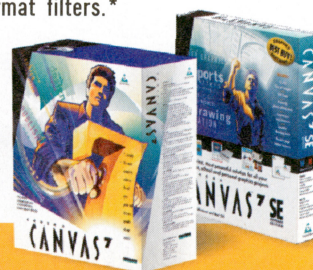
Eye-catching illustration, isn't it? And yes, despite the glistening highlights, the realistic textures, the subtle shading, and the soft air-brushed effects, this is a completely vector illustration. And it's only possible with Canvas 7.

Match pinpoint precision with painterly strokes through Canvas 7's exclusive Sprite technology. Blur vector lines, paint transparency effects, apply image filter plug-ins to vectors, text and images. It's hard to believe that you can draw like this – never mind in one, attractively priced program. When you're done, prepare your creative visions for print or web with an incredible array of over 40 file format filters.*

Feast your eyes on Canvas 7 today, and get a whole new outlook on illustration software.

Now available in Professional and Standard Editions

www.deneba.com/mhj
800.7DENEBA



Get Canvas 7 today!

Professional Edition \$375
Competitive Upgrade \$199.95
Standard Edition \$99.95

D E N E B A

CANVAS 7

No comparison.

© 2000 Copyright Deneba Software. This ad was created using nothing but Canvas 7. *40 file formats available in Canvas 7 Professional Edition only.

Developer Showcase

Get connected with CH Products,
www.chproducts.com

Flight Sim Yoke USB
F-16 Fighterstick USB
F-16 Combatstick USB
Gamestick 3D USB
Pro Throttle USB
Pro Pedals USB
Gamepad USB
Gamecard GC3



CH Products
760.598.2518
www.chproducts.com

TypeStyler 3

The ultimate styling tool for Internet, Print and Video.

You just won't believe your eyes!
The new TypeStyler is a powerhouse of spectacular special effects, yet retains the friendly ease of use that made the original TypeStyler so popular.

TypeStyler is the graphic designer's backroom secret weapon. Create dazzling web graphics, headlines, ads, signs, posters, videos titles and more in minutes, instead of hours!

TypeStyler is a complete stand-alone design, layout, and effects program yet also works seamlessly with Photoshop, Illustrator, GoLive, XPress, PageMaker, InDesign, FreeHand, FireWorks, and more.

- **Includes** style and shape libraries, design templates & 110 of the world's coolest fonts.
- **Always editable** -- text, shape & style -- makes changes & design reuse a snap.
- **Unlimited text shaping** -- circles, arcs, distortions -- any shape you can imagine.
- **Integrated path editing** tools to create virtually any logo or custom design.
- **Style** type and images instantly with millions of variations.
- **Create** buttons, banners, image maps and JavaScript rollovers for the Web.
- **Export** as Photoshop layers, Illustrator, GIF, PICT with alpha, EPS, & more.



To order, call 906-863-7798 or visit us at: www.typestyler.com

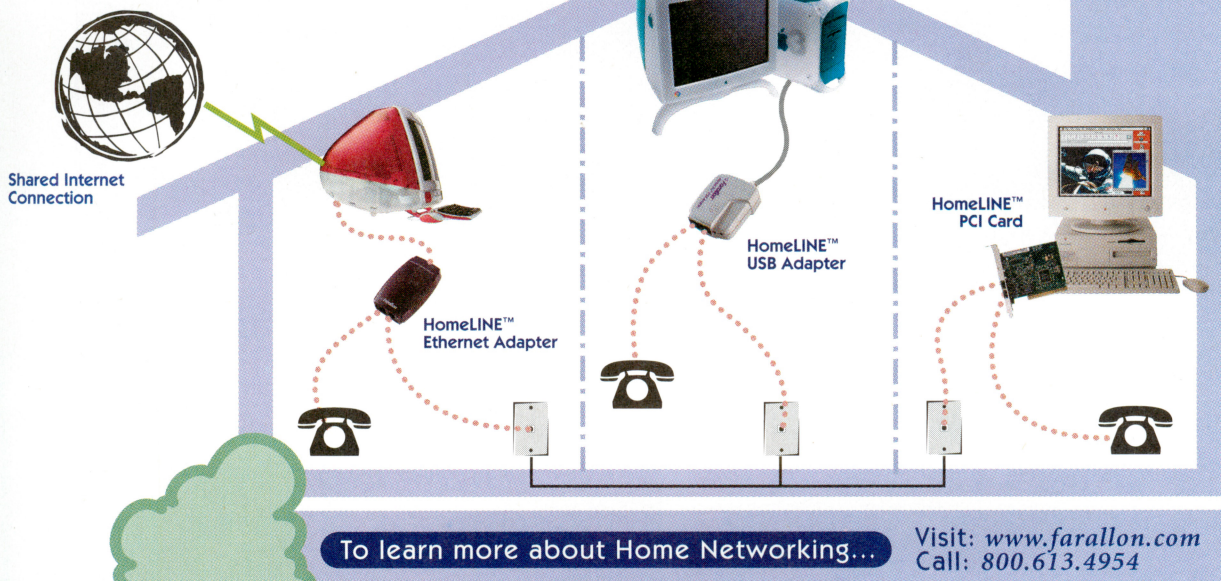
See us at MACWORLD Expo New York Booth 478

©1999 Strider Software, Inc. Brand and product names are trademarks or registered trademarks of their respective holders.

Get Connected with HomeLINE™

Farallon®

Share your Internet, Printers, Files and more
over existing home phone lines.



Developer Showcase

LIND

Automobile / Airline Power Adapters for iBook and PowerBook

- Engineered to the highest standards of quality, safety & reliability
- Sealed for protection against moisture & high humidity!
- Filters the input line voltage against spikes or surges!
- Emulates the output of your AC power supply!
- Input Low Voltage Shutdown Protection!
- Output "Short Circuit" Shutdown!
- Automatic Adapter Reset!
- Rugged Housing for Durability!
- 3 year warranty!

Simply the Right Choice!



Lind Electronics, Inc.
5414 Cambridge Street
Minneapolis, MN 55409

PH# 612-927-0909
FAX# 612-927-7740

To Order
Call 800-897-8994
or go to:
www.lindelectronics.com

MacCase™

*"Meet MacCase™ for the iBook!
The first cornerless case
designed to fit your iBook!"*



- Fully padded all around to protect the laptop inside
- Bicycle-inspired foam grip handle and removable shoulder strap
- Exterior and interior pockets
- Unique window allows Apple's logo to become part of the bag
- Made out of durable nylon materials
- Available in three flavors @ \$49.95

• www.jambags.com •



1-877-919-4-JAM

5674 El Camino Real, Ste.P
Carlsbad, CA 92008
760-602-0807

Distributors and resellers programs available.

All contents ©2000 Kusuma Enterprises, Inc. JAM and MacCase are trademarks of Kusuma Enterprises, Inc. iBook and the Apple logo are registered trademarks of Apple Computer, Inc.

Dr. Bott LLC

Your source for the coolest Mac Stuff!

Dr. Bott LLC serves
resellers, consultants and
individuals with just the
things you need.

Ask about our reseller program!

info@drbott.com • www.drbott.com

Phone: (503) 452-8101 • Fax: (503) 892-2475



800-348-2623

WWW.STAZSOFTWARE.COM

Developer Showcase

*Top Choice
Digital.Com*
Image is Everything

CALL TOLL-FREE

1(800)752-3935

LOCAL, INTERNATIONAL AND
CUSTOMER SERVICE (718)534-1190

Open Sundays

Business Hours (EST)

Sunday: 11:00am-6pm

Mon-Thurs: 9:30am-8pm

Friday: 9:30am-6:00pm

Saturday: Closed



URL: <http://www.topchoicedigital.com>

Email: info@topchoicedigital.com



ALL MERCHANDISE IS BRAND NEW WITH USA WARRANTY

SONY



NEW!

MVC-FD95

MVC-FD90 - CALL
MVC-FD85 - CALL
MVC-FD73 - \$369
DSC-S70 - NEW!
DSC-S50 - CALL
DSC-S30 - CALL

FUJIFILM



\$619

FINEPIX
4700

MX2900 - \$509
MX2700 - CALL
MX1700 - CALL
MX1400 - \$291
DS-260HD - CALL

EPSON



NEW!

PHOTO PC

PHOTO 850Z - CALL
PHOTO 750Z - CALL
PHOTO 650Z - CALL

NEW!



SONY DCR-VX2000

DCR-TRV900 - CALL
DCR-TRV20 - NEW
DCR-TRV11 NEW
DCR-PC5 NEW
DCR-PC3 - IN STOCK
DCR-PC100 - \$1489
DCR-TRV820 - \$1049
DCR-TRV720 - \$919
DCR-TRV520 - \$795
DCR-TRV320 - CALL
DCR-TRV120 - CALL
DSR-PD150 - NEW
DCR-TRV6 - NEW



\$3399

CANON
XL-1

ELURA - \$1119



\$1979

CANON
GL-1

OLYMPUS



\$816

C3030Z

3000Z - NEW
C2500L - \$929
C460 ZOOM - \$333
D360L - CALL

Canon



LOW PRICE

PS S-20

PS S-100 ELPH - NEW
EOS D-30 - CALL

Nikon



NEW!

COOLPIX 990

CPIX 950 - CALL
CPIX 800 - CALL

Toshiba



NEW!

PDR-M70

PDR-MR5 - CALL



call

RD 3000

Looking for a DVD Player? Call
us today for your **BEST** price!



JVC NEW!
GRDVC9800U

GRDVM90 - NEW
GRDVM70 - \$1029
GRDVL805U - \$704
GRDVL505U - \$615
GRDVC300U - \$549



CALL
Panasonic
PVD900

PVD800 - CALL
PVD600 - IN STOCK
PVD400 - IN STOCK
PVD200 - CALL
PVD100 - CALL



call

C500X1

TODAY'S
TECHNOLOGY
AT
TOMORROW'S
PRICES

Top Choice Digital is proud to offer a 14 day return policy on all digital cameras and a 7 day return on policy on all other merchandise. There is no credit card surcharge. All merchandise is guaranteed new and comes with a full USA warranty. Returned merchandise must be accompanied by a return authorization # and may be subject to a restocking fee. Prices and availability are subject to change without notice. The prices listed in this ad are mail order only and not available to local retail traffic. NYS residents must pay sales tax.

WE ALSO
CARRY:
BATTERIES
MEMORY
FILTERS
LENSES

Developer Showcase

\$197 Laptop Word-Processor

Weights 2 Pounds. Up to 500 hours on 3 AA's.
Text easily uploads directly into your open application on nearly any computer (Mac or PC)



Type on This!

www.smartinput.com • 1-800-366-8323

See website for details and options. 30-day money back guarantee

Can
uConnect™

uConnect
UNIVERSAL
Mac & PC
connectors

uConnect
extra

ALL IN ONE
3 uConnects + extra usb port

to your
Mac?

(877) 381-1400
www.momentumus.com

A Power Management Software that keeps your apples all in a row and a cool looking UPS. . .

**Power
Management
Software for
Macintosh**



ellipse Advanced Features

- ▶ Battery back-up and surge protection
- ▶ Modem/Network protection
- ▶ 7 or 8 receptacles for all peripherals
- ▶ Half the size and weight of competitive UPSs

What Battery Runtime Can You Expect?

	iMac	G3/G4 17" monitor	G3/G4 19" monitor
ellipse 300 USB	18 min	13 min	
ellipse 500 USB	18 min	13 min	8 min
ellipse 800 USB	40 min	22 min	16 min

**MGE's
Double Backup
to help keep
your Mac from
turning into
a lemon.**

MGE
UPS SYSTEMS

www.mgeups.com

iMac • iBook • PowerBook • G4/G3 • Beige Macs

MEMORY

Plus...
Peripherals, Accessories and More!

Absolutely, Positively
THE BEST PRICES!

plus...Great Service, Fast Shipping and Extensive Inventory!

Check our Web Site for Weekly Specials,
Super Deals and the most up-to-date information!

WE BUY USED MACS!




MAC Solutions

Authorized Dealer
MacSolutions, Inc.
11933 Wilshire Blvd., Los Angeles, CA 90025
phone 310 914-3200 fax 310 966-4433

(800) 873-3RAM

Secure Online Ordering @ www.macsolutions.com

Look.



Includes
CU-SeeMe™
full retail
version!

Who makes
the best Mac camera?

Z O O M

The full color, live-motion ZoomCam™ USB installs in a snap with
704 x 576 resolution and 30 frames per second for under \$80*!

1-800-631-3116 **ZOOM** www.zoom.com

© 2000 Zoom Telephonics, Inc. *estimated retail price

Available at Fry's Electronics 650-496-6000 & Micro-Center 800-743-7537

1-800-4 MEMORY

SELL • BUY • TRADE

WE CAN **BEAT**
ANY QUOTED PRICE
ON ANY MEMORY
FROM ANYWHERE

LIFETIME WARRANTY
NO RESTOCKING FEE
WE ARE THE BEST!!!
CALL AROUND
THEN CALL US

NOW BUYING
MEMORY
DIGITAL CAMERAS
NOTEBOOKS

WEB SITE WWW.18004MEMORY.COM

MEMORY

Now offered by
ASD Software, Inc.

TimeSlice®

Buy it today
www.asdsoft.com
\$59⁰⁰

Monitor the
cost and time
of your
projects



After trying it for the demo period, you'll
wonder how you ever lived without it.

A great billing tool for your business:

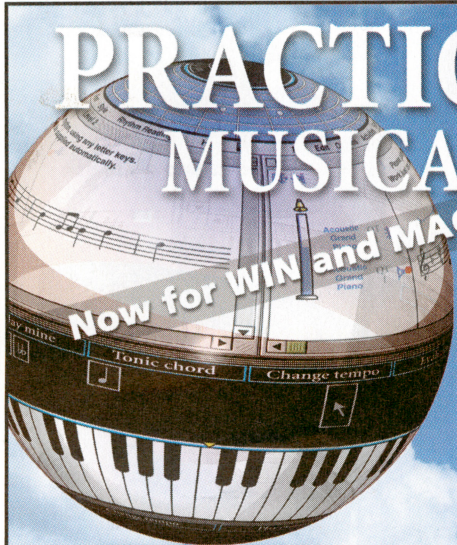
- Graphics
- Legal
- Consulting
- Word Processing
- Bookkeeping
- Web Design



ASD Software, Inc. • 4650 Arrow Hwy., Ste. E6, Montclair, CA 91763
Voice: 909.624.2594 • Fax 909.624.9574 • Email: info@asdsoft.com

PRACTICA MUSICA[®] 4

Now for WIN and MAC!



From reviews of previous versions
VERSION 3:
 "The best music education program for the Macintosh..."
 —MacUser, 1995
VERSION 2:
 "Simple, thorough, even charming... may be the best professor you've ever had!"
 —MacWorld, 1989

- Complete music theory and ear training • Beginning to advanced
- New: Coordinated textbook *Exploring Theory with Practica Musica*
- New: Customizable cross-platform activities • New: Win/Mac CD
- New: Polyphonic capabilities include 2-part rhythm tapping, 4 part dictation, writing tools to print and save music • Record keeping for student progress • Can be used with or without MIDI

For discounted shipping please supply code MH0700.

ALSO FROM ARS NOVA:
Songworks II Music composition and exploration, now with quickedit mode and draggable notes (Win/Mac). *Kidmusic* teaches children real music notation as they play with tunes and write their own (Mac only).

ARS NOVA • www.ars-nova.com • 800-445-4866

subscribe

Looking for more from a magazine?

Start your subscription to MacHome today!

Subscribe and receive **12 Issues of MacHome.**

Each issue is packed with **Reviews** of the latest products and software, **News and Updates** on new products; the most current

Gaming and Education reviews, and **Back to**

Basics keep you and your family up to date on the tools and innovations concerning your Macintosh; and more. **Most importantly**, our editorial is written in a *plain language format* this makes it easy for you to use and understand. MacHome is written in a clear and concise manner so all those who are interested can and will understand.

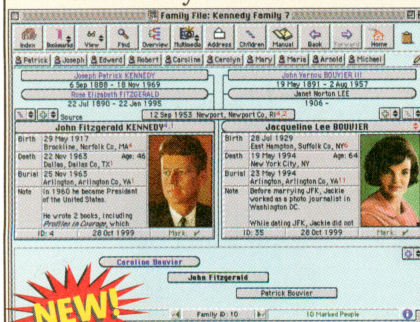
Subscribe and **also** receive **6 MacHome CDs** filled with the latest upgrades, demos shareware and other valuable information. All this for **\$34.95!** Call today and don't miss another issue!

800.800.6542



REUNION[®] 7

the family tree software



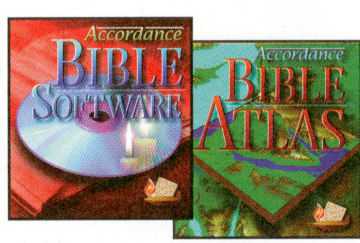
NEW! The best just got BETTER!

Over 80 new features and enhancements have been added. Print large, colorful tree charts, timeline charts, and fan charts, **GREAT for family reunions!** Plenty of room for names, dates, places, stories, notes, tidbits, and sources. Include all your favorite pictures, sounds, and home movies. Automatically build multimedia web pages to share your family history on the Internet! Fun and educational for the whole family. It's easy, fast, fun and made for the Mac!

To order, call MacConnection 800-800-2222.

Leister Productions
 PO Box 289, Mechanicsburg, PA 17055
 phone 717-697-1378 • fax 717-697-4373
 e-mail: info@LeisterPro.com
 web site/demo at www.LeisterPro.com

Bible Study comes alive with Accordance[®]



Computing Today called Accordance "the kind of software that makes Windows users wish they had Macs."

See for yourself:
 Accordance Library 4from \$49
 Accordance Bible Atlas\$69
 NIV Study Bible Basic Library\$59
 Expositor's Bible Commentary\$199
 also available: Scholar's Collection, Church Fathers, and Anchor Bible Dictionary

Call toll free: (877) 339-5855

OakTree Software, Inc.
 498 Palm Springs Drive, Suite 100
 Altamonte Springs, FL 32701 USA
 Tel: (407) 339-5855 Fax: (407) 339-9188
 Orders@OakSoft.com

www.OakSoft.com

SOLD today!

Call **Steve Gaynes** today to advertise in the Shopper!

Don't miss the next issue.
 415.957.1911
 ext. 38

iMate™

UNIVERSAL ADB TO USB ADAPTER

Easily Connects
Any ADB
Device
To USB-
Equipped
iMac or PC Computer

The innovative iMate USB to ADB adapter allows users to easily connect their existing ADB peripherals to iMacs, Macs with USB cards, and PCs with USB. The iMate is compatible with any ADB device including mice, keyboards, trackballs, trackpads, hardware dongles, and AppleVision displays. The iMate is a simple and inexpensive solution for making the transition to USB as well as preserving your investment in ADB devices. **Retail price \$39**

- One iMate can support multiple devices
- Activity LED
- Supports keyboard soft power on and off
- Successfully tested by Apple and major hardware manufacturers

G4Port™

THE SERIAL SOLUTION



Easy to install • Economical • Cost Effective

The g4Port universal serial adapter is the perfect companion for your new G4 (AGP graphics) computer. Designed from the ground up with the G4 in mind it supports every serial device that works on your older Macs.

The g4Port replaces the internal modem for 100% serial compatibility and provides a great transition for people with existing serial equipment. **Retail price \$49** (Internal modem must be removed)

SUPPORTS:

- Localtalk Printing & File Sharing
- Midi Interfaces
- Modems
- PDAs/Palm Pilots
- Serial Printers

GRIFFIN
TECHNOLOGY

615.255.0990

NE Mic™

UNIVERSAL MACINTOSH AUDIO ADAPTER

Low-Noise Amplifier
Inexpensive
Solution

No Setup or Drivers Required
Works with any Microphone



The NE Mic™ Audio Adapter allows you to use ANY inexpensive PC microphone with desktop Macs made by Apple Computer and other Mac clones. It also supports the new Blue and White G3 and iMac models. We also have a line of inexpensive microphones and headsets with great bundling prices (\$25 for NE Mic and desktop Mic or NE Mic and headset)

Designed for both professionals and hobbyists, the NE Mic™ adapter provides superior audio input quality when used with hundreds of readily available PC and consumer products. **Retail price \$20**

info@griffintechology.com

80 Fesslers Lane, Nashville, Tennessee 37210

www.griffintechology.com

macally™

NEW

Supports Keyboard boot-up

macally
iSweet®

macally
iHub7®

USB Peripherals for Mac



Macally is proud to bring you the latest USB peripherals for Mac user. iMouse, iMousePro, iBall, iBallPro, iStick, iShock, iHub, iHub7, iKey, iSweet, iSweetPro and iSweetNet are specifically designed to pair with your Mac.

Improve your productivity with Macally USB peripherals.

Call us for dealers near you 1-800-644-1132 Visit our website at www.macally.com

All trademarks or registered trademarks are property of their respective owners

Get More Power out of Your 'Book

5 Tips to Extend Battery Life

As someone who relies on portable computers every day, I take great interest in manufacturers' claims about the battery life of the products I use. When Apple first bragged that its portables are capable of running for up to six hours on a single battery charge, I admit it — I got a little thrill.

But thrills only last so long, and even six hours doesn't always get you all the way home. Here, then, are five tips for extending the battery life of your Mac portable:

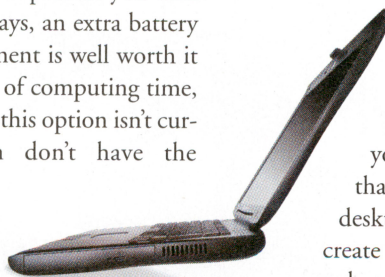
1. Buy a spare battery.

By Alan S. Golub

I know, this is cheating. But for you PowerBook users out there, swapping an extra battery for your CD/DVD module will provide you with a full day of computing power. These days, an extra battery retails for around \$199, and the investment is well worth it — if you can't get by with 10–12 hours of computing time, you're working too hard. Unfortunately, this option isn't currently available for iBooks, which don't have the PowerBook's module bays.

2. Take advantage of Sleep mode,

which is the closest thing to turning off your Mac without actually shutting down. In Sleep mode, only the RAM chips feed off the battery in order to store information while your portable sleeps. Enter Sleep mode by: (a) closing the lid on your portable; or (b) holding down the Command and Option keys while pressing the power button; or (c) clicking the Energy Saver button on the Control Strip and selecting Sleep Now. You can customize Sleep mode by opening the Energy Saver control panel, clicking Sleep Setup, and then clicking Show Details. From here you can change the length of inactivity before your system, display, and hard drive enter Sleep mode.



3. Unplug all peripherals.

Many PCMCIA cards and USB peripherals, such as Zip and floppy drives, run off energy supplied by your PowerBook. To maximize battery life, disconnect these juice-draining add-ons.

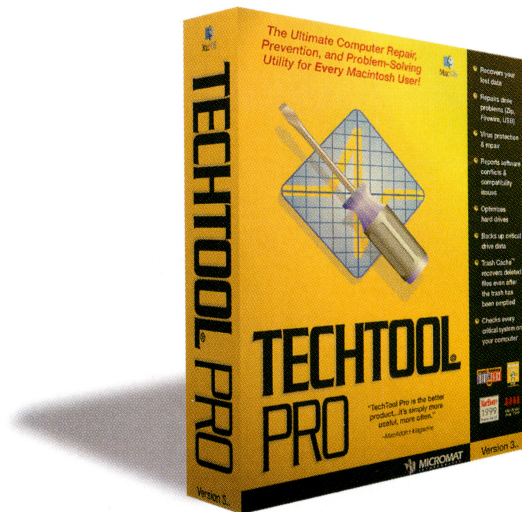
4. Spin down your hard disk and work off a RAM Disk.

Your hard disk spins whenever you tell it to read or write data. You can save energy by spinning down your hard disk and using a RAM Disk to store your data while you work. A RAM Disk is a portion of RAM that is used to store data. It appears on your desktop and works just like a separate drive. To create a RAM Disk, open the Memory control panel, turn RAM Disk on, check Save on Shut Down, and set RAM Disk Size to 1024K. On restart, the RAM Disk will appear on the desktop, ready for action. The next time you're working off battery power, spin down your hard disk by pressing the Energy Saver button on the Control Strip and selecting Spin Down Hard Disk. Save your work to your RAM Disk until you can plug in again.

5. Dim your display. A bright display makes it easier to work,

but it is one of the greatest resource hogs on your portable. Dim your display as much as possible by using the F1 and F2 keys. **MHJ**

One Box. Fix All.



Micromat's disk repair and Macintosh troubleshooting utility just became a whole lot better. Besides repairing drives, recovering data and checking the health of your Macintosh components, TechTool Pro 3 can now help protect you against virus problems and software conflicts. Version 3 also sports a new modern interface. But the real power of TechTool Pro 3 isn't in the features you can see, it's in the features you can't see. Like a

multitude of new drive repair routines that can save data that other utilities would simply abandon. An improved recovery system that will find lost files in the darkest caverns of a damaged drive. You'll also find improved performance on key features like disk optimization. Simply put, TechTool Pro 3 is the most complete and powerful troubleshooting utility available for your computer. Why settle for anything less?



Micromat Inc.
800-829-6227
707-566-3831
FAX: 707-566-3871
info@micromat.com
www.micromat.com



* This is a dramatization. Do not attempt to plug box into game console. Silly doll box not available in stores.™

FAKK2™